

**DIRECT TESTIMONY
OF
KEVIN R. KOCHEMS**

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DIRECT TESTIMONY

OF

KEVIN R. KOCHEMS

ON BEHALF OF

SOUTH CAROLINA ELECTRIC & GAS COMPANY

DOCKET NO. 2017-370-E

Q. PLEASE STATE YOUR FULL NAME AND BUSINESS ADDRESS.

A. My name is Kevin R. Kochems. My business address is 220
Operation Way, Cayce, South Carolina.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by SCANA Services, Inc. as Manager of Regulatory
Accounting. I was previously employed as Director of Nuclear Financial
Administration with the New Nuclear Development Project (the "Project" or
the "NND Project"). I am testifying on behalf of South Carolina Electric &
Gas Company ("SCE&G" or the "Company").

**Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
BUSINESS EXPERIENCE.**

A. I am a 1998 graduate of Canisius College, with a Bachelor of Science
Degree in Accounting. In 2002, I joined SCANA's Internal Audit
Department. In 2006, I accepted an accounting position with SCE&G's
NND Project. In 2011, I was promoted to Manager of Nuclear Financial
Administration. Following the Company's decision to abandon the NND

1 Project, I became Manager for Regulatory Accounting in the Rate
2 Department at SCANA Services.

3 **Q. HAVE YOU TESTIFIED BEFORE THIS COMMISSION IN THE**
4 **PAST?**

5 A. Yes, I have testified before the Public Service Commission of South
6 Carolina (the “Commission”) once before.

7 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
8 **PROCEEDING?**

9 A. The purpose of my testimony is to present the schedule of costs for
10 the NND Project as it stands after abandonment of the Project. Those costs
11 are set forth in *Exhibit No. ____ (KRK-1)*, which is an updated schedule of
12 the capital costs associated with the Project that were incurred as of
13 December 31, 2017, net of costs associated with those aspects of the Project
14 that are being (or have been) placed in service.¹ This is an updated version
15 of the schedule that was attached to the Joint Petition as Exhibit No. 13. No
16 additional capital costs are anticipated to be incurred as Project costs after
17 December 31, 2017. However, adjustments are being made as abandonment
18 transactions are finalized and as the costs incurred for construction activities
19 prior to December 31, 2017 are finalized. This will be the final cost schedule

¹ All costs are SCE&G’s 55% portion of the capital cost of the NND Project unless otherwise stated.

1 for the Project subject only to corrections and adjustments as mentioned
2 above.

3 My testimony discusses certain of the non-tax related accounting
4 adjustments that are required to implement the regulatory proposals set forth
5 in the Joint Petition and in the Company's prefiled testimony before the
6 Commission. My testimony also describes certain of the commercial steps
7 SCE&G undertook while the NND Project was ongoing to motivate
8 Westinghouse Electric Company, LLC ("Westinghouse"), and its
9 consortium partner to improve productivity and construction efficiency at the
10 site.

11 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

12 A. My testimony is organized into the following sections:

13 I. Current Request

14 II. Accounting Adjustments

15 III. Disputes Related to Productivity

16 IV. Cost Incurred after the Last Revised Rates Order

17 V. Post-Abandonment Costs That Were Expensed

18 VI. Conclusion.

19 **I. CURRENT REQUEST**

20 **Q. WHAT REQUEST IS THE COMPANY MAKING IN THIS DOCKET**
21 **WITH REGARD TO THE CAPITAL COST SCHEDULE?**

1 A. SCE&G is requesting that the Commission adopt *Exhibit No. ____*
2 (*KRK-1*) as the updated and approved capital cost schedule for the Project as
3 of December 31, 2017 under S.C. Code Ann. § 58-33-280(K) and S.C. Code
4 Ann. § 58-33-270(E). SCE&G further requests that the Commission find
5 that this cost schedule is a reasonable and prudent schedule of capital costs
6 under S.C. Code Ann. § 58-33-270(E), and that SCE&G is legally entitled to
7 amortize and recover these amounts through rates as authorized under S.C.
8 Code Ann. § 58-33-280(K).

9 As discussed further below, the costs set forth in *Exhibit No. ____*
10 (*KRK-1*) fall well within the scope of cost projections that have been
11 previously approved by the Commission as the reasonable and prudent cost
12 schedules for the Project. Furthermore, the majority of costs reflected on
13 *Exhibit No. ____ (KRK-1)*, specifically those incurred before June 30, 2016,
14 were reviewed and audited by the South Carolina Office of Regulatory Staff
15 (“ORS”) as historical costs in revised rate proceedings. Therefore, those
16 costs have already been determined by both the Commission and ORS to be
17 reasonable and prudent.

18 **Q. PLEASE EXPLAIN THE RELATIONSHIP BETWEEN EXHIBIT NO.**
19 **____ (KRK-1) AND THE REGULATORY PLANS PRESENTED IN**
20 **THE JOINT PETITION.**

21 A. As other witnesses have testified, SCE&G and Dominion Energy, Inc.
22 (“Dominion Energy”) are presenting rate mitigation plans in this proceeding

1 that would reduce the amount of NND Project investment that would be
2 recovered through rates. *Exhibit No. ____ (KRR-1)* establishes for regulatory
3 purposes the total amount of investment in the NND Project as of December
4 31, 2017, net of investments associated with assets that are being (or have
5 been) placed into service as fully operational transmission or generation
6 related assets, or nonutility property. The information contained in *Exhibit*
7 *No. ____ (KRR-1)*, therefore, provides the starting point for calculating the
8 amounts to be recovered under the three regulatory plans proposed in the
9 Joint Petition.

10 More specifically, each of those three regulatory plans involves
11 recognizing a regulatory asset and establishing the unrecovered costs of the
12 NND Project for ratemaking purposes. The net amount of the investment
13 included in this regulatory asset will vary among the plans, depending on the
14 size of any proposed write-offs or other offsets that would be recognized
15 under that specific plan — such as the offset of the Toshiba Corporate
16 Guarantee Settlement Payment or the defeasance of the regulatory liability
17 associated with the Toshiba Corporate Guarantee Settlement Payment.
18 Therefore, each of the regulatory plans begins with the amounts set forth in
19 *Exhibit No. ____ (KRR-1)* and then computes the amount to be recovered by
20 recognizing the other adjustments.

21 **Q. WHAT IS THE STATUTORY AUTHORITY FOR THE REQUEST**
22 **TO APPROVE THIS INVESTMENT IN THE NND PROJECT?**

1 A. While I am not an attorney, it is my understanding of S.C. Code Ann.
 2 § 58-33-280(K), that it is appropriate for a utility to recover through rates
 3 both its capital costs for an abandoned plant and its cost of capital applied to
 4 the unrecovered balance of those costs:

- 5 a) after a base load review order approving rate recovery has been
- 6 issued; and
- 7 b) if the decision to abandon construction of the plant was not the result
- 8 of imprudence by the utility.

9 If the decision to abandon the plant is found to be imprudent, it is also my
 10 understanding that under S.C. Code Ann. § 58-33-280(K), the Commission
 11 may only disallow recovery for those specific elements of cost which are
 12 shown to have been caused by imprudence on the part of the utility in failing
 13 to anticipate or avoid the allegedly imprudent costs, or to minimize the
 14 magnitude of the costs, considering the information available at the time that
 15 the utility could have acted to avoid or minimize the costs. *Exhibit No. ____*
 16 (*KRK-1*) presents the reasonable and prudent schedule of unrecovered costs
 17 of the NND Project in abandonment that are recoverable under S.C. Code
 18 Ann. § 58-33-280(K). As Mr. Addison, Mr. Young and Mr. Lynch testify,
 19 the decision to abandon the plant was prudently made, and there is no
 20 imprudence associated with the costs set forth on *Exhibit No. ____ (KRK-1)*.
 21 Therefore, the amounts listed on *Exhibit No. ____ (KRK-1)* are the amounts

1 that SCE&G has the legal right to request to recover under the Base Load
2 Review Act (“BLRA”).

3 **Q. HAVE THE COSTS SET FORTH ON EXHIBIT NO. ____ (KRK-1)**
4 **BEEN PREVIOUSLY REVIEWED AND APPROVED BY THIS**
5 **COMMISSION?**

6 A. Yes. As indicated above, the costs set forth in *Exhibit No. ____ (KRK-*
7 *I)* fall well within the cost projections that have been previously approved
8 by the Commission as reasonable and prudent costs of the Project.
9 Specifically, at the beginning of construction of this Project, the Company
10 requested approval of a capital cost schedule for the Project. That approval
11 was granted in Order No. 2009-104(A). Thereafter, as permitted by S.C.
12 Code Ann. § 58-33-270(E), the Company requested authorization to revise
13 the capital cost schedule for the Project as those cost schedules evolved over
14 the course of the Project. These requests were made on five occasions, in
15 Docket Nos. 2009-293-E, 2010-376-E, 2012-203-E, 2015-103-E, and 2016-
16 223-E. In each case, with certain adjustments proposed by the ORS, the
17 Commission conducted a contested case hearing, approved the revised cost
18 schedules and determined that the adjustments were reasonable and prudent.
19 The orders approving these updates are Order Nos. 2010-12, 2011-345,
20 2012-884, 2015-661, and 2016-794.

21 **Q. WHAT COSTS WERE APPROVED BY THE COMMISSION IN**
22 **THESE ORDERS?**

1 A. Chart A below provides a listing of the cost schedules approved by
 2 the Commission in the six orders issued under the BLRA. When Order No.
 3 2016-974 was issued, the total Project cost was 21% greater than what had
 4 been forecasted in 2008.

5 **CHART A**

6 COMMISSION APPROVED COST SCHEDULES (Billions of \$'s)

7

<u>Forecast Item</u>	<u>Order No. 2009- 104(A)</u>	<u>Order No. 2010-12</u>	<u>Order No. 2011-345</u>	<u>Order No. 2012-884</u>	<u>Order No. 2015-661</u>	<u>Order No. 2016- 794</u>
Capital Cost, 2007 Dollars	\$4.535	\$4.535	\$4.270	\$4.548	\$5.247	\$6.805
Escalation	\$1.514	\$2.025	\$1.261	\$0.968	\$1.300	\$0.532
Total Project Cash Flow	\$6.049	\$6.560	\$5.531	\$5.517	\$6.547	\$7.337
AFUDC	\$0.264	\$0.316	\$0.256	\$0.238	\$0.280	\$0.321
Gross Construction	\$6.313	\$6.875	\$5.787	\$5.755	\$6.827	\$7.658

8 **Q. ARE THE COSTS SET FORTH ON EXHIBIT NO. ____ (KRK-1)**
 9 **CONSISTENT WITH THE COST SCHEDULE APPROVED BY THIS**
 10 **COMMISSION IN 2016?**

11 A. Yes. The cost schedules presented in *Exhibit No. ____ (KRK-1)* are
 12 fully consistent with the amounts approved in the prior dockets, and
 13 specifically with those approved in the last update order, Order No. 2016-

1 794. These costs, therefore, have been subject to prior prudency review and
2 found to be prudent under the provisions of the BLRA. It is the Company's
3 position that the prior prudency determinations remain in force and are
4 binding.

5 **Q. CAN YOU ELABORATE?**

6 A. Yes. Under the capital cost schedules adopted by the Commission in
7 Order No. 2016-794, total spending on the Project was approved up to \$7.7
8 billion and the amount approved to be spent by December 31, 2017, was \$6.0
9 billion. The actual amount cumulative spent as of December 31, 2017, was
10 \$5.1 billion, including the cost of transmission projects and the other projects
11 that are being (or have been) placed in service. Therefore, spending on the
12 Project is fully consistent with the amounts approved in prior dockets, and
13 the amounts listed on *Exhibit No. ____ (KRK-1)*, particularly since this
14 schedule is net of transmission projects and other projects that are being (or
15 have been) placed in service. These amounts, therefore, are subject to the
16 prior prudency decisions made in the BLRA orders listed above. However,
17 to avoid any doubt about the status of the costs in question, SCE&G requests
18 that the Commission formally adopt *Exhibit No. ____ (KRK-1)* under the
19 terms of S.C. Code Ann. § 58-33-270(E) as the schedule of capital cost for
20 the Project in abandonment. SCE&G further asks that the Commission
21 recognize that these costs may be recovered under the terms of S.C. Code

1 Ann. § 58-33-280(K) subject to the mitigation plans proposed in the Joint
2 Petition.

3 **Q. DO THE COSTS SHOWN ON EXHIBIT NO. ____ (KRK-1) INCLUDE**
4 **PROJECTED COSTS?**

5 A. No. All of the costs included on *Exhibit No. ____ (KRK-1)* are actual
6 capital costs that were incurred on or before December 31, 2017. As noted
7 on *Exhibit No. ____ (KRK-1)*, adjustments may be made to increase or
8 decrease the capital costs as pre-abandonment and abandonment transactions
9 are finalized. These adjustments will be incorporated into the schedule when
10 finalized.

11 **Q. WERE THERE ANY PROJECT COSTS AFTER SEPTEMBER 30,**
12 **2017?**

13 A. SCE&G decided to absorb as expenses any costs incurred for work
14 done on the Project after the close of the third quarter of 2017. (Work done
15 to complete Transmission Projects or other assets that will not be abandoned
16 will be charged to other accounts.) Accordingly, there are no additional costs
17 being charged to the Project nor are any forecasted costs shown on *Exhibit*
18 *No. ____ (KRK-1)*.

19 As Mr. Young testifies, following the abandonment of the Project, it
20 was necessary to safely demobilize the workforce, stabilize the site and close
21 out certain permits. A significant portion of these costs were incurred by
22 September 30, 2017. After that date, SCE&G determined for accounting

1 purposes that it was unlikely that any future costs would be recovered
2 through rates and began expensing those costs below the line. Accordingly,
3 there are no costs associated with activities conducted after September 30,
4 2017 included in the amount shown on *Exhibit No. ____ (KRK-1)*. As
5 discussed above, only costs which were incurred for work done on the Project
6 before September 30, 2017 and finalized after this date will be charged to the
7 Project.

8 **Q. HAVE THE COSTS SHOWN ON EXHIBIT NO. ____ (KRK-1) BEEN**
9 **REVIEWED BY SCE&G'S ACCOUNTING AND PROJECT**
10 **OVERSIGHT PERSONNEL TO ENSURE THEY ARE**
11 **REASONABLE, PRUDENT AND APPROPRIATE?**

12 A. The costs shown on *Exhibit No. ____ (KRK-1)* have been reviewed
13 and approved by SCE&G's accounting and project oversight team to ensure
14 that they are reasonable, prudent, and appropriate capital costs of the Project.
15 SCE&G has provided ample testimony in past dockets concerning its
16 extensive budgetary controls and its process to ensure the accuracy of costs
17 invoiced or charged to the Project. These controls were described by the
18 Commission in Order No. 2015-661 and extensively discussed in the
19 testimony in that docket. These controls were enforced and applied to the
20 costs shown on *Exhibit No. ____ (KRK-1)*. The practices and procedures
21 described in prior dockets, and in Commission Order No. 2015-661,
22 remained in place through the abandonment of the Project. Specifically,

1 SCE&G maintained an adequate staff to review the costs charged or incurred
2 on behalf of the Project, and all invoices and other charges were reviewed
3 and approved by that staff. In addition, the review and approval of invoices
4 and other charges were performed under ongoing audit examinations and
5 oversight by ORS.

6 After the Company's abandonment decision, SCE&G retained the
7 necessary staff to review the final costs incurred or billed to the NND Project.
8 The appropriate level of review and approval of invoices and other costs
9 continue to be provided through close out of the Project. In addition, ORS
10 continued to review these costs following the abandonment of the Project.

11 **Q. WHAT COMPONENT OF THE COSTS SHOWN ON EXHIBIT NO.**
12 **___ (KRK-1) HAS ALSO BEEN AUDITED AND REVIEWED AS**
13 **PART OF PRIOR REVISED RATES PROCEEDINGS?**

14 A. *Exhibit No. ___ (KRK-1)* shows the investment in the NND Project,
15 not including Transmission or other projects that are not being abandoned,
16 was \$4.6 billion. Of that amount, \$3.5 billion has been examined and
17 determined to be prudently incurred in revised rates proceedings conducted
18 under the BLRA since 2008. The comparable amount, including
19 Transmission Projects and other projects that have been or will be placed in
20 service, is \$5.1 billion (total costs incurred) and \$3.8 billion (the total that
21 has received revised rates approval as detailed in Chart B later in this
22 testimony).

1 **Q. WHAT REVIEW DID THESE COSTS RECEIVE IN REVISED**
2 **RATES PROCEEDINGS?**

3 A. There have been nine revised rates proceedings and nine orders
4 authorizing revised rates for the Project beginning with Order No. 2009-
5 104(A). In all nine cases, ORS performed a detailed audit of SCE&G's
6 actual Project expenditures up to June of the year in question. ORS identified
7 any amounts they determined not to be reasonable and prudent capital costs
8 of the Project (which amounts were minimal), and issued a report to the
9 Commission verifying the amount of expended costs that were prudently
10 incurred and appropriate for recognition under the BLRA. In all nine
11 proceedings, the Commission accepted ORS's report and adopted ORS's
12 conclusion as to the reasonableness and prudence of the costs that ORS had
13 verified. No interested party ever sought a hearing or any other review of
14 these determinations.

15 **Q. DID ORS CONDUCT ONGOING AUDITS OF CONSTRUCTION**
16 **INVOICES AND INTERNAL CONTROLS?**

17 A. Yes. Throughout the course of the project ORS conducted on-going
18 and thorough auditing of project expenses. ORS personnel maintained an
19 office at the construction site, and ORS audit personnel performed their
20 testing from there, or their home office location.

21 ORS accurately explained its auditing function through the testimony
22 of the head of ORS's New Nuclear Development Office, Mr. Anthony James,

1 in the 2015 Update Proceeding. Mr. James testified, “ORS Audit Division
2 personnel conduct[ed] regulatory audit procedures on the Company’s
3 recorded Project expenditures. ORS evaluate[ed] the Company’s accounting
4 controls over Project expenditures, and, based on this evaluation,
5 determine[ed] the extent to which these controls prevent improper
6 payments.” (2015 Update Proceeding, Tr. at 709.) ORS reviewed and
7 audited samples of invoices and other documentation to ensure that they
8 reflected appropriate charges and payments were appropriately categorized
9 and recorded in the Project’s accounts.

10 In addition, during the course of the Project, as ORS testified, it
11 verified “the status of each milestone activity to ensure that construction
12 activity is in accordance with the Commission’s order,” and evaluated “cost
13 variances which may [have been] due to various changes (e.g., shifts in
14 scopes of work, payment timetables, construction schedule adjustments,
15 change orders, etc.) to determine if the cumulative amount of these changes
16 impact total approved capital cost of the Project....” (2015 Update
17 Proceeding, Tr. at 708.)

18 ORS auditing of the project was extensive and continuously done on
19 a monthly basis. A copy of Mr. James’s testimony in Docket No. 2015-103-
20 E is attached as *Exhibit No. __ (KRK-2)*.

21 **Q. DID ORS EVER DETERMINE ANY COST TO BE**
22 **INAPPROPRIATE?**

1 A. Over nine years of auditing expenditures for the NND Project, ORS
 2 auditors confirmed that nearly all costs charged to the Project were
 3 reasonable, prudent and appropriate costs of the Project. Out of a total of \$3.8
 4 billion in Project expenditures that ORS audited, approximately twelve
 5 thousand dollars in costs were disallowed. This twelve thousand dollar
 6 amount is disallowances only and does not include estimated costs contained
 7 in preliminary filings that were later trued-up to actual incurred costs or
 8 amounts that ORS deemed to be premature or that were otherwise deferred
 9 for future consideration.

10 **Q. PLEASE SUMMARIZE THE RESULTS OF THE REVISED RATES**
 11 **ORDERS.**

12 A. The results of the revised rates proceedings are set forth in Chart B,
 13 below:

14 **CHART B**

15 REVISED RATES ORDERS

16 **SCE&G Revised Rate Orders Including Transmission (Thousands of \$'s)**

Order Number	Docket	Revised Rates Granted	Incremental CWIP
2009-104(A)	2008-196-E	\$7,802	\$65,960
2009-696	2009-211-E	\$22,533	\$198,364
2010-625	2010-157-E	\$47,301	\$399,146
2011-738	2011-207-E	\$52,783	\$436,725
2012-761	2012-186-E	\$52,148	\$436,229
2013-680(A)	2013-150-E	\$67,240	\$569,356
2014-785	2014-187-E	\$66,238	\$561,062
2015-712	2015-160-E	\$64,526	\$547,224
2016-758	2016-224-E	\$64,428	\$574,150

Total (may not add due to rounding)	\$445,001	\$3,788,217
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1
2 **Q. WHAT WAS THE MOST RECENT REVISED RATES**
3 **PROCEEDING?**

4 A. The most recent revised rates proceeding was conducted in Docket
5 No. 2016-224-E and resulted in Order No. 2016-758. As shown above, upon
6 conclusion of that proceeding, the cumulative total of capital costs that had
7 been examined and determined to have been prudently incurred was \$3.8
8 billion. That amount represents expenditures through June 30, 2016, less
9 some costs that had been deferred for future consideration.

10 **II. ACCOUNTING ADJUSTMENTS**

11 **A. GENERAL ACCOUNTING ADJUSTMENTS**

12
13
14 **Q. HOW DOES SCE&G PROPOSE TO ACCOUNT FOR**
15 **TRANSMISSION PROJECTS THAT HAVE NOT BEEN**
16 **ABANDONED BUT INSTEAD PLACED IN SERVICE?**

17 A. As Mr. Richards testifies, SCE&G is placing in service, and therefore
18 has not abandoned, specific projects or assets the costs of which were
19 properly included within the NND Project under the provisions of the BLRA.
20 Those projects include the transmission facilities that were built as part of
21 the NND Project (the "Transmission Projects").

22 The Transmission Projects are being placed in service and will be used
23 and useful in providing utility service to customers. For that reason, it would

1 not be appropriate to treat the expenditures incurred in connection with their
2 construction as abandoned plant and to include such expenditures in the
3 regulatory asset in which the unrecovered costs of the abandoned NND
4 Project investment are recorded.

5 Therefore, as of December 31, 2017, SCE&G is no longer accounting
6 for the costs associated with the Transmission Projects as construction work
7 in progress (“CWIP”) associated with the NND Project. Instead, SCE&G
8 has recorded the costs which are related to completed projects within
9 completed plant accounts, and has recorded those costs which are related to
10 projects that are not yet complete within the appropriate non-NND CWIP
11 accounts. This accounting treatment applies under all three proposed
12 regulatory plans.

13 **Q. PLEASE EXPLAIN HOW COSTS ASSOCIATED WITH**
14 **TRANSMISSION PROJECTS WILL BE HANDLED.**

15 A. The BLRA expressly provides in S.C. Code Ann. § 58-33-220(5) for
16 investments in transmission systems that are associated with a base load
17 Project to be included in the capital cost of the project. In this case, SCE&G
18 included in the NND Project upgrades to its transmission system to ensure
19 that power could be delivered across the system to meet customer demand.
20 These transmission upgrades were included in the scope of work to construct
21 the Units, as approved under Order No. 2009-104(A) and subsequent BLRA
22 orders. The majority of these upgrades are already completed and in service.

1 The remainder of them will be completed shortly and placed in service. All
2 of them are within the approved capital cost projections of the NND Project.

3 As Mr. Richards testifies, these transmission upgrades represent a
4 necessary and valuable addition to the capacity, reliability and efficiency of
5 the transmission system that SCE&G uses to serve its customers daily. When
6 energized, they are or will be used in providing electric service to customers
7 and will not be abandoned.

8 For that reason, it would not be appropriate to reflect the cost of these
9 transmission upgrades in the unrecovered costs associated with the NND
10 Project abandonment. Therefore, in preparing *Exhibit No. ____ (KRK-1)*, we
11 have removed the capital costs for these Transmission Projects from the cost
12 of the abandoned NND Project. The costs associated with projects that are
13 complete have been transferred to transmission plant in service accounts. The
14 costs associated with the projects that are still under construction are
15 recorded in the appropriate transmission CWIP accounts. The total amount
16 incurred on the Transmission Projects through December 31, 2017 and not
17 included in *Exhibit No. ____ (KRK-1)* is approximately \$322 million.

18 **Q. ARE THE COSTS INCURRED FOR THESE TRANSMISSION**
19 **PROJECTS CONSISTENT WITH THE AMOUNTS PREVIOUSLY**
20 **APPROVED BY THE COMMISSION?**

21 A. Yes. The amount of Transmission costs actually spent to date, and the
22 amount reasonably projected to complete the transmission projects that

1 remain to be completed, is within the cost schedule for the NND Project
2 approved in Order No. 2016-794. The amount designated for the
3 Transmission Projects was \$398 million, and the amount expended and
4 estimated to be expended at the completion of the projects remains within
5 this budgeted amount. Furthermore, removing these costs from the
6 previously approved BLRA cost schedules does not change the fact that the
7 spending on the Project as shown on *Exhibit No. ____ (KRK-1)* was within
8 the approved cost schedules set forth in Order No. 2016-794.

9 **Q. PLEASE DESCRIBE HOW SCE&G HAS TREATED OTHER, NON-**
10 **TRANSMISSION INVESTMENTS THAT WERE ORIGINALLY**
11 **ASSOCIATED WITH THE NND PROJECT, BUT THAT WILL BE**
12 **(OR HAVE BEEN) PLACED INTO SERVICE.**

13 A. *Exhibit No. ____ (KRK-1)* includes a column labeled “Adjustments”
14 which reflects an \$86 million reduction in costs associated with other projects
15 that will be (or have been) placed into service. As Mr. Young testifies, these
16 projects include a number of assets that are being (or have been) placed in
17 service.

18 **Q. PLEASE DESCRIBE THOSE PROJECTS.**

19 A. **Switchyard** - As part of the NND Project, a new and upgraded
20 Switchyard was built to serve generating activity at the site. This Switchyard
21 is currently serving generating activity at the site and providing important
22 interconnections with the transmission systems operated by Santee Cooper

1 and Duke Energy Carolinas and is also the point of interconnection for the
2 transmission lines that have been recently built to strengthen SCE&G's
3 transmission system. The Switchyard has not been and will not be
4 abandoned. Approximately \$31 million of the cost of the Switchyard was
5 included in the BLRA Project costs.

6 **Offsite Water System** - Included in the NND Project cost schedule
7 was the cost of constructing a new, off-site water system to provide filtered
8 and potable water for the generation operations at the V.C. Summer site. The
9 new off-site water system is being completed and will be placed into service.
10 The cost of the off-site water system that was previously included in the
11 BLRA cost schedule, which is approximately \$23 million, is being
12 transferred to plant in service.

13 **Nuclear Operations Building** - Another part of the NND Project was
14 the construction of a Nuclear Operations Building ("NOB") to house staff for
15 generation operations at the V.C. Summer site. The NOB has been completed
16 and is in service housing Unit 1 staff. It will not be abandoned. That part of
17 the cost of the NOB, which was originally included in BLRA Project costs,
18 has been transferred to plant in service. The amount transferred is
19 approximately \$11 million.

20 **CHAMPS Work Management System** - Included in the NND
21 Project cost was NND's share of the cost for the procurement and
22 deployment of a new CHAMPS work management system that will replace

1 the nearly obsolete and no longer supported work management system
2 currently employed by Unit 1. The new work management system is in the
3 final stages of implementation at Unit 1 and will improve the efficiency of
4 operations at the unit. The new CHAMPS Work Management System will
5 not be abandoned. Accordingly, that portion of the cost of the CHAMPS
6 Work Management System that was previously included in the NND Project
7 costs has been transferred to plant in service. The amount transferred is
8 approximately \$7 million.

9 **Nuclear Learning Center Annex** - The Nuclear Learning Center
10 Annex which was completed to support the training of NND personnel will
11 now be utilized by Unit 1 to support continued operations on site. The amount
12 of the cost of the new Nuclear Learning Center Annex which was included
13 in the Project was approximately \$5 million. This amount has been or is being
14 transferred to plant in service.

15 **Other Items** - The remaining balance of approximately \$9 million
16 being transferred to plant in service includes a number of items that are being
17 put into service to support operations at the site. They include the new
18 emergency services facilities and security training facilities that were
19 constructed as part of the Project, as well as multiple software programs and
20 licenses, items of network hardware, and fiber communication huts that were
21 constructed or acquired as part of the NND Project and are now in service.

1 **Q. IS SCE&G ASKING THE COMMISSION TO TAKE ANY RATE**
2 **MAKING OR OTHER ACTION REGARDING THE**
3 **TRANSMISSION COSTS OR OTHER COSTS DISCUSSED ABOVE**
4 **APART FROM THEIR TRANSFER OUT OF BLRA COST**
5 **SCHEDULES?**

6 A. SCE&G is not asking the Commission to take any ratemaking action
7 regarding the Transmission Costs (\$322 million). Instead, SCE&G is asking
8 that the approximately \$32 million in financing cost recovery currently
9 provided through revised rates under the BLRA be left in place. This \$32
10 million amount is associated with only \$276 million of the total amount of
11 the Transmission Projects investment, which as mentioned above is \$322
12 million. SCE&G asks the Commission to recognize their transfer out of the
13 BLRA cost schedules, as set forth on *Exhibit No. ____ (KRK-1)*, and into
14 plant in service or normal electric jurisdictional CWIP and the creation of a
15 regulatory asset for deferral of operating and maintenance costs (O&M,
16 depreciation, property taxes, insurance and other costs) pending
17 consideration of those amounts in a future rate proceeding.

18 For the other non-transmission investments of approximately \$86
19 million that were originally associated with the NND Project discussed above
20 that will (or have been) placed in service, SCE&G is asking for different
21 ratemaking actions, as further discussed later in this testimony.

1 **Q. WHAT REGULATORY TREATMENT IS SCE&G REQUESTING**
2 **CONCERNING ITS ACQUISITION OF THE 540 MW OF**
3 **COMBINED CYCLE GAS GENERATION CAPACITY?**

4 A. The acquisition cost of the 540 MW Columbia Energy Center
5 (“CEC”) gas generation facility is approximately \$180 million. Under the
6 Customer Benefit Plan and the No Merger Benefits Plan, SCE&G is
7 requesting that this \$180 million be recognized as a below-the-line expense
8 for regulatory accounting purposes such that it will be permanently excluded
9 from SCE&G’s retail electric customer rates. Customers will only pay the
10 ongoing fuel costs, operation and maintenance costs, and renewal,
11 replacement and betterment capital costs associated with these assets, but the
12 initial acquisition cost will not be recovered through retail rates. By Order
13 No. 2018-272, the Commission transferred the certificate of environmental
14 compatibility and public convenience and necessity from the prior owner to
15 SCE&G. This facility was acquired on May 9, 2018.

16 **B. ACCOUNTING ADJUSTMENTS UNDER THE CUSTOMER**
17 **BENEFITS PLAN**

18 **Q. PLEASE EXPLAIN THE ACCOUNTING ADJUSTMENTS UNDER**
19 **THE CUSTOMER BENEFITS PLAN.**

20 A. The provisions of the Customer Benefits Plan are described by other
21 witnesses. As those other witnesses explain, the Customer Benefits Plan
22 provides that, after the closing of the business combination with Dominion

1 Energy, Inc. ("Dominion Energy"), SCE&G will write down its unrecovered
2 costs of the NND Project by a cumulative total of approximately \$1.4 billion.
3 This \$1.4 billion total will include the write-downs that SCE&G has already
4 taken to NND assets beginning in 2017. The \$1.4 billion of costs written
5 down under the Customer Benefits Plan would be permanently excluded
6 from consideration in establishing retail electric rates going forward.

7 In addition, under the Customer Benefits Plan, SCE&G will not seek
8 recovery of certain other regulatory assets which are associated with the
9 following items:

10 (1) The interest rate swap losses related to the debt that was
11 anticipated to have been issued for the NND Project, which had been
12 properly deferred under Order No. 2013-776;

13 (2) The accumulated deferred income taxes arising from the NND
14 Project allowance for equity funds used during construction, which
15 had been properly deferred based on customary prior ratemaking
16 actions with respect to recovery of taxes;

17 (3) The financing costs on deferred tax assets related to nuclear
18 construction, which had been properly deferred under Order No.
19 2013-803; and

20 (4) The foregone Domestic Production Activity Deductions
21 ("DPAD"), net of the research and experimentation-related tax
22 credits, as well as accrued interest expense and other costs related to

1 the uncertain tax position arising from the tax treatment of research
2 and experimentation expenditures, all of which had been properly
3 deferred under Order No. 2016-373.

4 The Joint Petition contains further details concerning the structure and
5 accounting of these other regulatory assets and Ms. Griffin testifies
6 concerning the specific tax issues involved. The aggregate amounts
7 associated with these items, including foregone DPAD amounts resulting
8 from carry-back claims filed with a 2017 tax return, totaling approximately
9 \$361 million are proposed to be recognized for regulatory purposes as write
10 offs representing below-the-line expenses which will be excluded when
11 setting rates for SCE&G's retail electric customers going forward.

12 **Q. HOW WILL SCE&G ACCOUNT FOR THE NET NND PROJECT**
13 **INVESTMENT UNDER THE CUSTOMER BENEFITS PLAN?**

14 A. As of December 31, 2017, approximately \$4.0 billion in unrecovered
15 capital costs associated with the NND Project investment was recorded as a
16 regulatory asset on SCE&G's balance sheet. This amount is net of \$670
17 million in impairment charges recorded as of that date by the Company due
18 to the uncertainty of recovery.

19 Under the Customer Benefits Plan, the approximately \$4.0 billion
20 balance in the regulatory asset will be reduced to a net balance of
21 approximately \$3.3 billion. That \$3.3 billion balance will be amortized on a
22 straight-line basis over 20 years. The resulting amortization expense will be

1 approximately \$166 million per year. This \$166 million per year in
2 amortization expense would be considered as part of the revenue requirement
3 used in calculating rates under the new Capital Cost Rider Component,
4 subject to the rate mitigation measures and recovery cap which are discussed
5 below. Mr. Rooks will testify in more detail concerning these matters.

6 **Q. UNDER THE CUSTOMER BENEFITS PLAN, WHAT FINANCING**
7 **COSTS WOULD APPLY TO THE NET UNRECOVERED BALANCE**
8 **IN THIS REGULATORY ASSET?**

9 A. The revenue requirement to be recovered under the Capital Cost Rider
10 Component would include the financing costs on the unrecovered balance of
11 NND Project investment, which is initially approximately \$3.3 billion.
12 Those financing costs would be computed at a fixed cost of capital that would
13 reflect SCE&G's capital structure for ratemaking purposes of 52.81% equity
14 and 47.19% debt, as stated in the Joint Petition. This fixed cost of capital
15 would also reflect SCE&G's weighted average cost of debt of 5.85% and an
16 allowed return on equity of 10.25%. Under the Customer Benefits Plan,
17 these percentages would be fixed during the 20-year amortization period.
18 Thus, the overall cost of capital would be fixed at 8.17% until the balance of
19 the NND Project cost has been fully recovered at the end of 20 years.

20 **Q. HOW WILL TAX IMPACTS OF THE NND PROJECT BE TREATED**
21 **UNDER THE CUSTOMER BENEFITS PLAN?**

1 A. The Tax Cuts and Jobs Act (“TCJA”) effects will be included in the
2 NND Tax Rider. Ms. Griffin testifies concerning these tax issues.

3 **Q. SPECIFICALLY, UNDER THE CUSTOMER BENEFITS PLAN,**
4 **HOW WILL RECOVERY OF NND PROJECT COSTS BE**
5 **REFLECTED IN RATES?**

6 A. As Mr. Rooks testifies, when the Customer Benefits Plan becomes
7 effective, SCE&G will reduce its existing retail electric rates by
8 approximately \$413 million annually. This amount reflects the total amount
9 of revised rates recovery under the provisions of the BLRA associated with
10 the NND Project, which is approximately \$445 million, reduced by the
11 approximately \$32 million of revised rates recovery associated with
12 Transmission Projects that have been or will be placed into service, as
13 discussed above. This \$413 million revenue adjustment will remove from
14 existing retail electric rates any rate recovery under the BLRA that is
15 associated with the NND Project investment that has been abandoned.

16 SCE&G would then implement the Capital Cost Rider Component to
17 recover the amortization expense associated with the net NND Project
18 investment and the cost of capital applied to the unrecovered balance of the
19 NND Project investment, net of deferred income taxes, as described above.
20 Specifically, SCE&G will determine the net impact of these deferred income
21 tax amounts on SCE&G’s revenue requirements and adjust the revenue to be

1 recovered through the Capital Cost Rider Component and the NND Tax
2 Rider accordingly, as Ms. Griffin testifies.

3 To provide the bill reductions under the Customer Benefits Plan, a
4 regulatory liability of \$575 million will be established at closing of the
5 merger which will be amortized to provide an approximate 3.5% retail
6 electric bill reduction as compared to the annualized May 2017 retail electric
7 rates. This bill reduction will be exclusive of fuel clause adjustments and
8 other non-NND adjustments, including rate case adjustments. Mr. Rooks
9 will testify concerning the structure of this bill reduction and the amortization
10 of the \$575 million regulatory liability that will be associated with it. In
11 summary, the revenue requirement to be recovered from customers under the
12 Capital Cost Rider Component will be designed to recover approximately
13 \$330 million per year. The approximately \$85 million reduction in retail
14 electric revenue produces an approximate 3.5% reduction in electric bills.

15 **Q. PLEASE DESCRIBE HOW SCE&G HAS TREATED OTHER, NON-**
16 **TRANSMISSION INVESTMENTS THAT WERE ORIGINALLY**
17 **ASSOCIATED WITH THE NND PROJECT, BUT THAT WILL BE**
18 **(OR HAVE BEEN) PLACED INTO SERVICE.**

19 A. The \$86 million associated with other assets originally associated with
20 the NND Project that were not abandoned and are being (or have been)
21 placed into service will be part of the \$1.4 billion write off of the NND
22 Project investment in the Customer Benefits Plan. Receiving similar

1 treatment under this plan is a December 2017 adjustment of \$0.9 million that
2 was the result of the truing up of an estimated Allowance for Funds Used
3 During Construction (“AFUDC”) rate. As a result, both these costs will be
4 permanently excluded from consideration in establishing retail electric rates
5 going forward.

6 **C. THE NO MERGER BENEFITS PLAN**

7 **Q. IN WHAT CONTEXT IS SCE&G PROPOSING THAT THE**
8 **COMMISSION CONSIDER THE NO MERGER BENEFITS PLAN?**

9 A. SCE&G is proposing that the Commission consider the No Merger
10 Benefits Plan as a disfavored option to be implemented if for any reason the
11 business combination with Dominion Energy does not close and the
12 Customer Benefits Plan is not approved. As Ms. Griffin testifies, the No
13 Merger Benefits Plan is a disfavored option and should not be considered if
14 the Customer Benefits Plan can be implemented.

15 **Q. HOW WILL SCE&G ACCOUNT FOR NND PROJECT**
16 **INVESTMENT UNDER THE NO MERGER BENEFITS PLAN?**

17 A. As described above, as of December 31, 2017, SCE&G had recorded
18 on its balance sheet an approximate \$4.0 billion regulatory asset for the
19 unrecovered amount of the NND Project investment, net of investment in
20 assets that are being placed in service, and also net of an impairment charge
21 of approximately \$670 million. The \$180 million cost of SCE&G’s
22 acquisition of CEC is also included in the \$670 million impairment amount.

1 Upon the acquisition of CEC, the value in the unrecovered nuclear project
2 investment regulatory asset has been adjusted to remove the \$180 million
3 from the \$670 million impairment concurrent with a full write-down of the
4 CEC acquisition. As a result, the unrecovered NND Project regulatory asset
5 as of December 31, 2017 has been effectively adjusted to \$4.2 billion, and
6 CEC has been properly recorded with no net carrying value on the
7 Company's balance sheet.

8 Under the Customer Benefits Plan, the \$1.3 billion in one-time cash
9 payments following the closing of the business combination will defease the
10 regulatory liability associated with the Toshiba Corporate Guarantee
11 Settlement Payment and represents the return of amounts previously
12 collected from customers. Under the No Merger Benefits Plan, however,
13 there would be no such cash payments to customers. Instead, the net
14 proceeds of the Toshiba Corporate Guarantee Settlement Payment, less
15 amounts required to satisfy certain lien payments, would be credited against
16 the balance of the NND Project investment regulatory asset. The amount of
17 that credit would be approximately \$1.1 billion.

18 Therefore, under the No Merger Benefits Plan, the balance in the
19 NND Project costs to be recovered from customers would be approximately
20 \$3.1 billion (\$4.2 billion less \$1.1 billion). That amount would be amortized
21 on a straight line basis over 50 years. The annual amortization amount would
22 be approximately \$62 million. However, SCE&G is not asking for any rate

1 adjustments associated with this \$62 million expense in this proceeding.
2 Instead, SCE&G is asking for a re-characterization of current revised rates
3 recovery associated the NND Project investment, which is approximately
4 \$413 million annually, as being a recovery of both the financing costs (*i.e.*,
5 return on) and the amortization expense associated with this regulatory asset
6 (*i.e.*, recovery of) until SCE&G's next retail electric base rate proceeding.

7 **Q. UNDER THE NO MERGER BENEFITS PLAN, IS SCE&G SEEKING**
8 **RECOVERY OF THE APPROXIMATELY \$361 MILLION IN OTHER**
9 **REGULATORY ASSETS?**

10 A. No. Under the No Merger Benefits Plan, SCE&G is not seeking
11 recovery of the \$361 million in other regulatory assets that have been treated
12 as impaired and written off below-the-line as of December 31, 2017.

13 **Q. UNDER THE NO MERGER BENEFITS PLAN, IS SCE&G**
14 **PROPOSING A CAPITAL COST RIDER COMPONENT FOR THE**
15 **RECOVERY OF NND PROJECT INVESTMENT, AS IS PROPOSED**
16 **UNDER THE CUSTOMER BENEFITS PLAN?**

17 A. No. Under the No Merger Benefits Plan, SCE&G is not proposing a
18 Capital Cost Rider Component.

19 **Q. HOW DOES SCE&G PROPOSE TO PROVIDE CUSTOMERS WITH**
20 **THE TAX BENEFITS ASSOCIATED WITH THE ABANDONMENT**
21 **OF THE NND PROJECT UNDER THE NO MERGER BENEFITS**
22 **PLAN?**

1 A. Under the No Merger Benefits Plan, there will be no Capital Cost
2 Rider Component. As such, the deferred tax benefits associated with the
3 abandonment of the NND Project including the prior research and
4 experimentation deductions, as discussed by Ms. Griffin, are included within
5 the derivation of the rate base and rate recovery considerations which are
6 inherent in the plan.

7 **Q. UNDER THE NO MERGER BENEFITS PLAN, HOW DOES SCE&G**
8 **PROPOSE TO PASS SAVINGS ARISING UNDER THE TCJA ON TO**
9 **ITS CUSTOMERS?**

10 A. Under the No Merger Benefits Plan, SCE&G proposes to implement
11 a Tax Rider similar to that which would apply under the Customer Benefits
12 Plan. However, under the No Merger Benefits Plan (and under the Base
13 Request), the effects of the TCJA associated with the NND Project
14 investment will be passed through the Tax Rider. Ms. Griffin testifies in
15 more detail regarding these matters.

16 **Q. PLEASE DESCRIBE HOW SCE&G HAS TREATED OTHER, NON-**
17 **TRANSMISSION INVESTMENTS THAT WERE ORIGINALLY**
18 **ASSOCIATED WITH THE NND PROJECT, BUT THAT WILL BE**
19 **(OR HAVE BEEN) PLACED INTO SERVICE.**

20 A. SCE&G is not asking the Commission to take any ratemaking action
21 regarding the other Project costs that were originally associated with the
22 NND Project that will be (or have been) placed in service totaling \$86 million

1 under the No Merger Plan. The only action being requested is for the
2 Commission to recognize their transfer out of the BLRA cost schedules, as
3 set forth on *Exhibit No. ____ (KRK-1)*, and into plant in service or normal
4 electric jurisdictional CWIP.

5 **D. THE BASE REQUEST**

6 **Q. IN WHAT CONTEXT IS SCE&G PROPOSING THAT THE**
7 **COMMISSION CONSIDER THE BASE REQUEST?**

8 A. SCE&G is requesting the Commission to consider the Base Request
9 only if neither the Customer Benefits Plan nor the No Merger Benefits Plan
10 is approved. The Base Request is the most disfavored of all three regulatory
11 plans. However, it does represent rate and accounting treatment that SCE&G
12 believes it would be lawfully entitled to receive under the BLRA if neither
13 of the voluntary rate mitigation plans is adopted.

14 **Q. HOW WILL SCE&G ACCOUNT FOR THE NEW NUCLEAR**
15 **PROJECT INVESTMENT UNDER THE BASE REQUEST?**

16 A. Under the Base Request, SCE&G does not propose any write down of
17 its investment in the NND Project for ratemaking purposes, apart from the
18 application of the net proceeds of the Toshiba Corporation Guarantee
19 Settlement Payment to the balance of the unrecovered investment in the
20 regulatory asset. Accordingly, under the Base Request, the balance in the
21 regulatory asset to be amortized into rates would be approximately \$3.5
22 billion (\$4.6 billion less \$1.1 billion). SCE&G proposes to amortize this

1 amount on a straight line basis in equal amounts of approximately \$72
2 million over 50 years.

3 **Q. WHAT FINANCING COSTS WOULD APPLY TO THE**
4 **UNRECOVERED BALANCE IN THIS REGULATORY ASSET?**

5 A. SCE&G is requesting that the approximately \$413 million in
6 financing cost recovery through revised rates under the BLRA that is
7 currently associated with the NND Project investment be re-characterized as
8 a return on and a recovery of that investment through amortization. SCE&G
9 requests that this re-characterization apply pending a future retail electric rate
10 case. Although under the BLRA SCE&G would be entitled to seek it, no rate
11 adjustment is proposed in this proceeding.

12 **Q. UNDER THE BASE REQUEST, IS SCE&G SEEKING RECOVERY**
13 **OF THE \$361 MILLION IN OTHER REGULATORY ASSETS**
14 **DISCUSSED ABOVE?**

15 A. Yes. Under the Base Request, SCE&G is proposing to recover the
16 \$361 million in other regulatory assets discussed above. SCE&G would
17 request that the Commission issue an accounting order directing SCE&G to
18 account for these regulatory assets as proposed in Exhibit 11 to the Joint
19 Petition at pages 2-3.

20 **Q. HOW WOULD THE TAX BENEFITS ARISING FROM THE NND**
21 **PROJECT ABANDONMENT DEDUCTION BE ACCOUNTED FOR**
22 **UNDER THE BASE REQUEST?**

1 A. Under the Base Request, the tax benefits arising from the NND
2 Project abandonment deduction and prior research and experimentation
3 deductions would be accounted for in the same way as is described under the
4 No Merger Benefits Plan above.

5 **Q. IS SCE&G PROPOSING A TAX RIDER TO APPLY UNDER THE**
6 **BASE REQUEST?**

7 A. Yes. As indicated above, SCE&G is proposing that a Tax Rider apply
8 under the Base Request but no NND Tax Rider would apply. Ms. Griffin
9 and Mr. Rooks testify in more detail concerning that Tax Rider.

10 **Q. WHAT IS SCE&G ASKING THE COMMISSION TO DO IN**
11 **REGARD TO THESE ACCOUNTING MATTERS?**

12 A. SCE&G believes that the accounting adjustments proposed here are a
13 fair and reasonable way of implementing the regulatory plans to which they
14 apply. SCE&G requests that the Commission adopt the Customer Benefit
15 Plan and the accounting provisions associated with it as the preferred option
16 for resolving these matters.

17 **III. DISPUTES RELATED TO PRODUCTIVITY**
18

19 **Q. LABOR PRODUCTIVITY AND DELAY WERE IMPORTANT**
20 **ISSUES IN PAST PROCEEDINGS. DID SCE&G EVER DISPUTE**
21 **PAYMENT REQUESTS FROM WESTINGHOUSE DUE TO LABOR**
22 **PRODUCTIVITY OR DELAY ISSUES?**

1 A. Yes. In August 2014, the Consortium provided SCE&G and Santee
2 Cooper with a “new Revised, Fully-Integrated Construction Schedule,”
3 which, in effect, extended the substantial completion date for Unit 2 by more
4 than three years from the original forecasted date in the Engineering,
5 Procurement, and Construction (“EPC”) Agreement and extended the
6 substantial completion date of Unit 3 by approximately one and a half years.
7 Moreover, this resulted in SCE&G’s 55% share of the Project costs now
8 totaling \$6.8 billion, which was approximately \$500 million over the
9 originally forecasted cost of \$6.3 billion. These delays and increased costs
10 were of concern.

11 SCE&G ultimately decided, in conjunction with Santee Cooper, to
12 suspend progress payments to the Consortium in the summer of 2014.
13 Stephen Byrne – SCE&G’s Chief Operating Officer at the time – reiterated
14 these concerns in a September 25, 2014 letter to Jeff Lyash at Chicago Bridge
15 and Iron Company (“CB&I”), stating that:

16 Those Payment Schedules, in their current form, would require
17 full payment well in advance of when the Consortium expects
18 to complete the Project. The disconnect is almost certain to
19 worsen with the upcoming re-baselined work schedule. We
20 have addressed this problem by rejecting recent requests for
21 payments that were not justified by the Consortium’s current
22 Project Schedule The Consortium has no right to be
23 rewarded for unexcused Project delays by receiving payment
24 in advance of when it actually performs the work.

25 ***Exhibit No. __ (KRR-3).*** The Consortium responded to SCE&G’s letter that
26 same day, stating that:

1 In the event that the Owner fails to pay these invoices within
2 fifteen (15) Days of the Owner's receipt of this letter . . . [the]
3 Contractor has the right to suspend performance of the Work
4 as if Owner had ordered a suspension in accordance with
5 Section 22.1.' The Consortium expressly reserves its right to
6 do so along with exercising its rights under Section 22.5 to
7 terminate the Agreement and any other remedy available to it.

8 ***Exhibit No. __ (KRK-4).*** In 2015, when it became clear that the
9 Consortium was not making significant progress in solving the problem with
10 labor productivity and related delay at the site, SCE&G began disputing
11 additional portions of invoices which it believed were caused either by poor
12 productivity or delay. SCE&G's position was that these additional costs were
13 incurred in violation of the obligation that Westinghouse and its EPC
14 Contract partner CB&I assumed under the EPC Contract to use "Good
15 Industry Practices" in building the Units. "Good Industry Practices" was
16 defined in Article I of the EPC Contract as:

17 any of the practices, methods, standards and acts engaged in and
18 generally acceptable to the nuclear power industry in the United States
19 that, at a particular time, in the exercise of reasonable judgment in
20 light of the facts known at the time a decision was made could have
21 been expected to accomplish the desired result consistent with good
22 business practices, reliability, economy, and safety.

23
24 Of course, Westinghouse and CB&I rejected this allegation and
25 asserted that the productivity issues were not the result of failure to meet
26 Good Industry Practices but were the result of the complexity of the
27 construction, the new Nuclear Regulatory Commission licensing regime, and
28 other factors outside of their direct control.

1 Nevertheless, each month SCE&G computed the amount of each
2 invoice it believed was related to poor productivity or delay and began
3 disputing charges and withholding payments on that basis. In response,
4 Westinghouse and CB&I asserted that they held rights to walk off the job if
5 these invoices were not paid in full. The likelihood of litigation between the
6 parties was becoming greater each month as SCE&G disputed a growing
7 balance of invoiced costs and took an increasingly adversarial position with
8 the Consortium.

9 **Q. HOW WERE THESE ISSUES RESOLVED?**

10 A. During September and October of 2015, SCE&G negotiated an
11 amendment to the EPC Contract with Westinghouse (the “Amendment”).
12 SCE&G announced the Amendment on October 27, 2015. The Amendment
13 settled these disputed claims and gave SCE&G and Santee Cooper the option
14 to have the principal scopes of work under the EPC Contract completed for
15 a fixed price (the “Fixed Price Option.”)

16 **IV. COSTS INCURRED AFTER THE LAST REVISED RATES ORDER**

17
18 **Q. AS YOU DISCUSS ABOVE, IN ISSUING THE LAST REVISED**
19 **RATES ORDER, THE COMMISSION AND ORS REVIEWED COSTS**
20 **INCURRED THROUGH JUNE 30, 2016 AND FOUND THEM TO BE**
21 **REASONABLE AND PRUDENT COSTS OF THE PROJECT. ARE**
22 **THE COSTS INCURRED AFTER JUNE 30, 2016 REASONABLE**
23 **AND PRUDENT COSTS OF THE PROJECT?**

1 A. Yes. The costs incurred after June 30, 2016 are reasonable and prudent
2 costs of the Project. Those costs fall into two categories: (a) the costs incurred
3 prior to the Westinghouse bankruptcy which occurred on March 29, 2017;
4 and (b) the costs incurred after the Westinghouse bankruptcy. Because of
5 the bankruptcy, the EPC Contract costs incurred in each of these periods were
6 incurred under different contractual arrangements.

7 **Q. ON WHAT BASIS WERE EPC CONTRACT COSTS INCURRED**
8 **BETWEEN JUNE 30, 2016 AND MARCH 29, 2017?**

9 A. During the period between June 30, 2016 and March 29, 2017, costs
10 were incurred under the EPC Contract as amended on October 27, 2015,
11 which was approved by the Commission after having been accepted by ORS
12 in a settlement stipulation.

13 **Q. PLEASE EXPLAIN THE OCTOBER 2015 EPC CONTRACT**
14 **AMENDMENT AND HOW COSTS WERE PAID UNDER IT.**

15 A. The 2015 Amendment gave SCE&G and Santee Cooper the option
16 to require Westinghouse to charge a fixed price for all but a limited number
17 of the remaining scopes of work under the EPC Contract. The Amendment
18 also provided that the parties would establish a milestone payment schedule
19 under which fixed payment amounts would be tied to the achievement of
20 specific construction milestones. The Amendment provided a period of time
21 for the parties to agree on the milestone payment schedule, after which an
22 independent Dispute Resolution Board (“DRB”) would establish the required

1 milestone payment schedule through arbitration. While the milestone
2 payment schedule was being produced, the Amendment provided that
3 SCE&G would make payments to Westinghouse based on an interim
4 payment schedule specified in the Amendment. These payments were
5 extended by the DRB and remained in force until the DRB issued its final
6 order. At that point, the milestone payment schedule went into effect. These
7 and other terms of the Amendment were presented to the Commission in
8 Docket No. 2016-223-E and approved in Order No. 2016-794 based, in part,
9 on the settlement stipulation signed by ORS and other parties. SCE&G and
10 Santee Cooper exercised the Fixed Price Option in mid-2016, and the fixed
11 price was effective for payments after June 30, 2015.

12 Therefore, between June 30, 2016, and the Westinghouse bankruptcy
13 filing on March 29, 2017, EPC Contract payments were made either under
14 the interim payment schedule provided for in the Amendment and approved
15 by the Commission in Order No. 2016-794, or under the milestone payment
16 schedule, which was also provided for in the Amendment and adopted by the
17 DRB for payments beginning in December 2016. In all cases, these payments
18 were contractually determined by the DRB under provisions of the
19 Amendment which were reviewed and accepted by ORS and approved by
20 the Commission.

1 **Q. WHAT EPC COST CATEGORIES WERE NOT INCLUDED IN THE**
2 **INTERIM PAYMENT SCHEDULE OR THE MILESTONE**
3 **PAYMENT SCHEDULE?**

4 A. The interim payment schedule covered those scopes of work that
5 became fixed with the Amendment. A limited number of scopes of work
6 were excluded from this and were paid in accordance with the existing
7 payment practices as required by the EPC Contract. These excluded scopes
8 of work included certain Time and Materials work, future change orders that
9 were Owner-directed or based on changed circumstances, and other specific
10 items identified in Exhibit C of the 2015 EPC Amendment (the “Non-Fixed
11 EPC Contract Costs”).

12 **Q. DURING THE PERIOD BETWEEN JUNE 30, 2016 AND DECEMBER**
13 **31, 2017, WHAT AMOUNT WAS EXPENDED IN THESE NON-**
14 **FIXED CATEGORIES?**

15 A. During the period from June 30, 2016, through March 29, 2017, the
16 total amount expended under the EPC Contract in these Non-Fixed EPC
17 Contract Cost categories was \$9.3 million, which was less than one percent
18 of the total cost incurred with respect to the Project during this timeframe.
19 Spending on these Non-Fixed EPC Contract Cost categories after the
20 Westinghouse bankruptcy was covered by the Interim Assessment
21 Agreement (“IAA”) discussed below.

1 **Q. WERE THESE COSTS REVIEWED AND APPROVED TO ENSURE**
2 **THEY WERE REASONABLE, PRUDENT, AND APPROPRIATE?**

3 A. As it has been since the inception of the Project, these Non-Fixed EPC
4 Contract Costs were carefully reviewed and approved by SCE&G in
5 accordance with its established practices to ensure they were reasonable,
6 appropriate and prudent.

7 **Q. WHAT WAS THE AMOUNT OF OWNER'S COST EXPENDED AND**
8 **CHARGED TO THE PROJECT DURING THE PERIOD JUNE 30,**
9 **2016, THROUGH DECEMBER 31, 2017?**

10 A. During the period June 30, 2016, through December 31, 2017,
11 SCE&G incurred Owner's Capital Project Costs of \$135 million. This does
12 not include 1) project expenses which were incurred after September 30,
13 2017, which will be absorbed by SCE&G or 2) project expenses for pre-
14 abandonment and abandonment transactions which were incurred prior to
15 September 30, 2017 but not finalized until after December 31, 2017.

16 **Q. WERE THE OWNER'S COSTS INCURRED DURING THIS PERIOD**
17 **REASONABLE, PRUDENT, AND APPROPRIATE?**

18 A. Yes. In prior dockets, SCE&G explained in detail the process by
19 which Owner's cost budgets were prepared, and the process by which all
20 charges assigned to the Project for support from other areas of SCANA or
21 SCE&G were reviewed and approved. In prior dockets, SCE&G also
22 provided extensive testimony concerning the process by which the staffing

1 and budgeting for the NND team was determined, reviewed, challenged and
2 approved by senior management. The method by which Owner's costs were
3 established and verified remained in place until the abandonment of the
4 Project.

5 **Q. HOW WERE THESE OWNER'S COSTS CALCULATED?**

6 A. As stated in prior dockets, SCE&G first developed the Owner's Cost
7 forecast at a 100% level, inclusive of Santee Cooper's percentage to support
8 the day-to-day management of the project, and then identified its share of
9 Owner's Cost. The Company also identified the cost that was not shared
10 with Santee Cooper in developing the budget reported for purposes of the
11 BLRA. To do so, at the department level, SCE&G created budgets for all
12 cost centers that provided support for the construction and future operation
13 of the Units. These budgets were broken down by month for the current year
14 and annually thereafter until the end of the Project and were established at
15 the resource code level, which is SCE&G's accounting code that identifies
16 the nature of the cost.

17 The Owner's Cost budget was built on a cost-center by cost-center
18 basis. For the budget, each cost center manager developed a budget based on
19 his or her professional assessment of the future needs of the Project and his
20 or her experience. These budgets were supported by staffing and training
21 plans, current corporate salary structures, outside services budgets, and other

1 cost center specific budget documents as available. These detailed cost
2 center budgets rolled up and supported the overall budget.

3 To obtain budget information from areas other than NND, SCE&G
4 required all cost centers outside of NND to assign time and cost directly to
5 the Project based on time sheets and invoices for actual work performed.
6 These cost centers included such groups as SCANA Audit Services, Legal,
7 Environmental, Risk Management and Insurance, and multiple groups within
8 current Nuclear Operations such as Unit 1 Health Physics that may have
9 assisted on an as-needed basis in creating staffing plans or writing operating
10 procedures for parts of Unit 2 and 3 operations.

11 **Q. WHAT OVERSIGHT OF OWNER'S COSTS EXISTED**
12 **THROUGHOUT THE COURSE OF THE PROJECT?**

13 A. All cost centers that anticipated providing direct support to the Project
14 were required to provide detailed budgets for their activities through the
15 commercial operation date. NND, SCANA, and Santee Cooper senior
16 leadership then reviewed these budgets and sought adjustments to them
17 where it disagreed with the assumptions or results.

18 We were equally vigilant as to actual cost billed to the Project. Each
19 cost was reviewed and approved by the originating department prior to the
20 charge being assigned to the Project. The NND team then reviewed these
21 charges each month to ensure their accuracy, necessity and propriety. Our
22 joint-owner, Santee Cooper, had an equal interest in making sure that all

1 charges were appropriate and reviewed these charges independently on a
2 monthly basis.

3 In some instances, Unit 1 employees who had specific expertise spent
4 time on the Project. To ensure that no costs related to the operation of Unit
5 1 were billed to the Project, the Company recorded the associated labor cost
6 as a direct cost related to the construction of Units 2 and 3. As well, some
7 costs were shared between the Units in order to increase efficiencies and
8 economies of scale, with the cost being allocated to each Unit based upon
9 their derived benefit from the expenses. In all other instances, SCE&G
10 separately accounted for the cost to operate Unit 1 and ensured that this cost
11 was not recorded as a cost of the project.

12 **Q. WERE OWNER'S COST BUDGETS PROVIDED TO ORS?**

13 A. SCE&G made the detailed budgets and supporting documentation
14 available to ORS upon its request.

15 **Q. DID THESE CONTROLS CONTINUE UNTIL DECEMBER 31, 2017?**

16 A. All of the controls discussed above were in place during the period
17 between June 30, 2016, and December 31, 2017, and fully operational to
18 ensure that Owner's costs were reasonable, prudent, and appropriate. The
19 NND team carefully reviewed all charges for the Owner's costs that were
20 incurred and assigned to the Project and determined they were reasonable,
21 prudent, and appropriate. These costs have been subject to oversight and
22 review by ORS just as other costs of the Project have been. Furthermore, the

1 Owner's costs incurred during the period were fully within the capital cost
2 schedules approved in Order No. 2016-794.

3 **Q. PLEASE EXPLAIN THE BASIS FOR PAYMENT OF THE EPC**
4 **CONTRACT COSTS INCURRED AFTER WESTINGHOUSE'S**
5 **BANKRUPTCY FILING ON MARCH 29, 2017.**

6 A. In the period immediately prior to Westinghouse's bankruptcy,
7 Westinghouse, SCE&G and Santee Cooper negotiated an IAA which
8 allowed work on the Project to continue while SCE&G and Santee Cooper
9 evaluated their options with respect to completion of the Units. The IAA was
10 necessary to keep the construction workforce and supply chain intact while
11 this evaluation occurred. The IAA went into effect immediately upon the
12 bankruptcy filing. Mr. Young testifies in more detail about the reasons for
13 the IAA.

14 During the IAA period, and outside of any other contractual
15 provisions, SCE&G paid Westinghouse's principal construction contractor,
16 Fluor Corporation, directly for its proper labor and services. SCE&G
17 provided Westinghouse verification of those payments. SCE&G also agreed
18 to fund Westinghouse's internal labor costs associated with the Project
19 during the IAA period. In addition, each week, Westinghouse provided
20 SCE&G with an estimate of costs that Westinghouse would incur with their
21 vendors and subcontractors on the Project. Based on these weekly estimates,
22 SCE&G transmitted funds to Westinghouse. SCE&G is still reconciling the

1 estimated payments made during the IAA against actual invoices to ensure
2 they are reasonable and appropriate costs of the Project. When this
3 reconciliation is complete, an adjustment will be made to the capital cost
4 schedules.

5 Where necessary, some isolated small payments were made to
6 contractors and vendors with past due accounts and whose work was critical
7 both in scope and timing. These costs are reflected in the amounts set forth
8 in *Exhibit No. ____ (KRK-1)* and totaled \$2.5 million.

9 Upon abandonment of the Project on July 31, 2017, all construction
10 work ceased on the Project other than work necessary to safely and efficiently
11 demobilize construction, to close out permits, and to stabilize the site. The
12 costs incurred from August 1, 2017 forward have also been audited and
13 reviewed using the same oversight, control, and review procedures as applied
14 to previously incurred costs. ORS continued to audit costs and evaluate the
15 reasonableness and prudence of those abandonment costs during the post-
16 construction period through November 2017.

17 **Q. HOW WERE THE PAYMENTS MADE UNDER THE IAA**
18 **TREATED?**

19 A. Payments made under the IAA will be considered against the
20 milestone payments under the EPC Contract unless Westinghouse rejects the
21 EPC Contract in bankruptcy. The IAA otherwise suspended the milestone
22 payments.

1 **Q. WAS ORS INVOLVED IN REVIEWING THESE COSTS PRIOR TO**
2 **ABANDONMENT?**

3 A. Yes. As indicated above, ORS continued to review IAA costs up until
4 the decision to abandon the Project, and afterwards as the Project was being
5 demobilized.

6 **Q. WHAT WAS THE APPROVED COST SCHEDULE ADOPTED BY**
7 **THE COMMISSION IN ORDER NO. 2016-794?**

8 A. The cost schedule for the Project, which the Commission approved in
9 Order No. 2016-794, subject to ORS's stipulation of agreement, is attached
10 to my testimony as *Exhibit No. ____ (KRK-5)*. This cost schedule has been
11 adjusted to reflect the removal from the authorized total of the cost of
12 Transmission projects.

13 **Q. HAS SCE&G PREPARED A SCHEDULE SHOWING THE COSTS**
14 **INCURRED ON THE PROJECT BY CATEGORY SINCE JUNE 30,**
15 **2016?**

16 A. A schedule of costs incurred on the Project by the Plant Cost Category
17 since June 30, 2016 is attached to my testimony as *Exhibit No. ____ (KRK-*
18 **6)**. These costs also have been adjusted to remove the capital costs associated
19 with Transmission projects.

20 **V. POST-ABANDONMENT COSTS THAT WERE EXPENSED**

21 **Q. WHAT AMOUNT OF POST-ABANDONMENT COSTS**
22 **ASSOCIATED WITH THE PROJECT HAS SCE&G EXPENSED**

SUCH THAT THEY ARE NOT REFLECTED IN THE CAPITAL COSTS SHOWN ON EXHIBIT NO. ____ (Krk-1)?

SCE&G has expensed approximately \$19.2 million in costs associated with the abandonment of the NND Project through December 31, 2017, rather than include them in the capital costs associated with the Project. These costs are not reflected in *Exhibit No. ____ (KRR-1)*. They will not be considered in setting SCE&G's rates now or in the future and customers will not be required to pay them.

DO THE COSTS SHOWN ON EXHIBIT NO. ____ (KRK-1) INCLUDE ANY SEVERANCE COSTS RELATED TO THE ABANDONMENT OF THE PROJECT COSTS?

No. SCE&G's severance costs related to the abandonment were expensed and not included in the capital cost of the NND Project. Severance costs are not reflected on *Exhibit No. ____ (KRK-1)*. Because SCE&G has expensed these costs outside of the test period used to set rates, they will not be considered in setting SCE&G's rates now or in the future and customers will not be required to pay them.

VI. CONCLUSION

DOES EXHIBIT NO. ____ (KRK-1) PROVIDE AN ACCURATE ACCOUNTING OF PLANT COSTS UP TO AND THROUGH THE DECISION TO ABANDON THE PROJECT?

Yes. **Exhibit No. ____ (KRK-1)** provides an accurate accounting of

1 the reasonable, prudent and appropriate plant costs up to and through the
2 Company's decision to abandon the Project. These are the costs that SCE&G
3 should be allowed to recover under S.C. Code Ann. § 58-33-280(K) and other
4 statutory provisions.

5 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

6 A. Yes, it does.

RESTATED and UPDATED CONSTRUCTION EXPENDITURES

(Thousands of \$)

V.C. Summer Units 2 and 3 - Summary of SCE&G Capital Cost Components**Actual through December 2017 plus
Adjustments**

	Total	Actual											Transfers
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Plant Cost Categories													
Fixed with No Adjustment	1,740,029	4,628	35,199	22,066	67,394	50,551	66,057	22,960	11,634	366,348	727,099	419,018	(52,923)
Firm with Fixed Adjustment A	266,750	-	-	63,250	27,500	24,200	75,075	42,900	7,700	26,125	-	-	-
Firm with Fixed Adjustment B	238,868	-	5,499	35,768	49,513	39,371	45,043	31,048	22,834	9,791	-	-	-
Firm with Indexed Adjustment	873,741	-	45,869	148,713	115,172	137,871	118,769	150,530	129,994	26,822	-	-	-
Actual Craft Wages	133,306	-	312	1,937	9,779	11,682	21,091	25,217	38,785	24,503	-	-	-
Non-Labor Costs	406,936	-	1,271	31,255	79,778	9,298	65,227	70,154	105,390	44,564	-	-	-
Time & Materials	15,787	-	1,013	155	1,004	764	1,878	2,300	4,055	2,048	2,461	109	-
Owners Costs	409,671	17,096	8,198	15,206	23,743	29,276	43,643	47,245	51,807	56,885	73,152	76,099	(32,679)
Total Base Project Costs(2007 \$)	4,085,088	21,723	97,360	318,349	373,883	303,013	436,784	392,354	372,200	557,085	802,712	495,226	(85,602)
Total Project Escalation	387,161	-	3,516	20,907	23,688	32,930	68,787	81,553	86,682	47,711	12,575	8,812	-
Total Revised Project Cash Flow	4,472,249	21,723	100,876	339,256	397,571	335,943	505,571	473,907	458,882	604,797	815,287	504,038	(85,602)
Cumulative Project Cash Flow(Revised)		21,723	122,600	461,856	859,427	1,195,370	1,700,941	2,174,848	2,633,730	3,238,526	4,053,813	4,557,851	4,472,249
AFUDC(Capitalized Interest)	173,271	645	3,495	10,539	17,099	14,039	17,538	23,723	21,563	18,713	27,366	18,551	-
Gross Construction	4,645,520	22,368	104,371	349,795	414,670	349,981	523,109	497,631	480,445	623,510	842,653	522,588	(85,602)
Construction Work in Progress		22,368	126,739	476,535	891,205	1,241,186	1,764,295	2,261,926	2,742,371	3,365,881	4,208,534	4,731,122	4,645,520

Notes

Not included in the "Transfers" column is the transfer of the railroad relocation spur. This item was moved to VCS Unit 1 in July of 2018 and will decrease the Construction Work in Progress balance approximately \$1.4M.

Not included in the "Transfers" column is the transfer of the associated AFUDC. This was quantified and transferred in 2018, resulting in a decrease to the Construction Work in Progress balance of approximately \$3.6M.

Not included above are misc. accounting adjustments occurring in 2018 which will decrease the Construction Work in Progress balance approximately \$2M.

Not included above is the sale of a reactor coolant pump which occurred in March 2018 and will decrease the Construction Work in Progress balance approximately \$8M.

SCE&G is currently working with Southern Company to sell additional equipment and materials. Any proceeds received from this sale, or any other sale will decrease the Construction Work in Progress balance.

The costs above include milestone payments to WEC totaling \$9M, which would be due should they not reject the EPC contract. These are properly accrued, and will result in a decrease to the Construction Work in Progress balance should they not be paid.

The costs above include the estimated payments made to WEC during the IAA. Once the reconciliation of these payments can be finalized, any necessary adjustment will be included in the Construction Work in Progress balance.

**THE OFFICE OF REGULATORY STAFF
SETTLEMENT TESTIMONY & EXHIBIT
OF**

M. ANTHONY JAMES, P.E.

JUNE 29, 2015



DOCKET NO 2015-103-E

Summary

**Petition of South Carolina Electric & Gas Company for
Updates and Revisions to the Capital Cost Schedule and
Schedules Related to the Construction of a Nuclear Base
Load Generation Facility at Jenkinsville, South Carolina**

SETTLEMENT TESTIMONY & EXHIBIT

OF

M. ANTHONY JAMES, P.E.

FOR

THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF

DOCKET NO. 2015-103-E

IN RE: PETITION OF SOUTH CAROLINA ELECTRIC & GAS COMPANY

FOR UPDATES AND REVISIONS TO THE CAPITAL COST SCHEDULE

AND SCHEDULES RELATED TO THE CONSTRUCTION OF A NUCLEAR

BASE LOAD GENERATION FACILITY AT JENKINSVILLE, SOUTH

CAROLINA

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

A. My name is Anthony James. My business address is 1401 Main Street, Suite 900, Columbia, South Carolina 29201. I am employed by the State of South Carolina as the Director of New Nuclear Development for the Office of Regulatory Staff ("ORS").

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I hold a Bachelor's Degree in Engineering and a Master's Degree in Earth and Environmental Resources Management from the University of South Carolina. I am a Professional Engineer registered in the State of South Carolina. I have been employed as a Project Engineer at environmental engineering consulting firms and at the South Carolina Department of Health and Environmental Control ("DHEC"). I joined DHEC in 1991 and was promoted from Project Engineer to Program Manager in 1995. As

1 Program Manager in the Bureau of Water, I was responsible for coordinating DHEC's
2 statewide wastewater compliance efforts. In 2004, I joined the ORS Electric Department
3 as a Senior Electric Specialist and was later promoted to Associate Program Manager.
4 As a member of the Electric Department my responsibilities focused on testifying on
5 various filings by investor-owned utilities, serving as the lead contact for renewable
6 energy activities and implementing management objectives. In 2012, I was promoted to
7 Deputy Director of the Electric and Natural Gas Division. As Deputy Director, my
8 responsibilities grew to include providing general oversight of all activities of the Electric
9 Department as well as the Natural Gas Department and supporting senior management
10 objectives. In 2014, I was promoted to Director of New Nuclear Development to provide
11 oversight of the nuclear construction projects in South Carolina. Collectively, I have
12 more than twenty-five years of experience as an environmental engineer in regulatory
13 compliance.

14 **Q. HAVE YOU TESTIFIED BEFORE THE PUBLIC SERVICE COMMISSION OF**
15 **SOUTH CAROLINA ("COMMISSION")?**

16 **A.** Yes. I have testified before the Commission in general base rate cases, a number
17 of fuel clause proceedings, and a previous proceeding to update the schedule and budget
18 for the construction of the new nuclear units in Jenkinsville, SC. I have also been an
19 ORS witness in proceedings regarding renewable energy resources, specifically, net
20 metering programs and smart grid standards. I have also provided updates to the
21 Commission via allowable ex parte briefings.

22 **Q. WHAT IS THE PURPOSE OF YOUR SETTLEMENT TESTIMONY IN THIS**
23 **PROCEEDING?**

1 A. The purpose of my settlement testimony is to provide an overview of the South
2 Carolina Electric & Gas Company's (the "Company" or "SCE&G") petition for updates
3 and revisions to the capital cost schedule and schedules related to the construction of a
4 nuclear base load generation facility at Jenkinsville, South Carolina ("Petition"). I
5 summarize ORS's findings regarding SCE&G's Petition and the major components of the
6 settlement agreement ("Settlement") which ORS supports. Lastly, I discuss ORS's
7 regulatory oversight activities with regard to the construction of V.C. Summer Nuclear
8 Station AP1000 Units 2 & 3 (the "Units").

9 **Q. WHAT IS SCE&G REQUESTING IN ITS PETITION?**

10 A. Under S.C. Code Ann. § 58-33-270(E)(1) of the Base Load Review Act
11 ("BLRA"), SCE&G is requesting the Commission to modify the construction schedule to
12 reflect new substantial completion dates ("SCDs") of June 19, 2019 and June 16, 2020
13 for Unit 2 and Unit 3, respectively. SCE&G is also requesting an increase to the capital
14 cost estimates by approximately \$698 million (2007 dollars). See Exhibit MAJ-1. The
15 \$698 million is composed of approximately \$453 million in Engineering, Procurement
16 and Construction Contract ("EPC Contract") Costs and \$245 million in Owner's Costs.
17 Of the \$698 million request, \$325 million (which is net of \$86 million in liquidated
18 damages) in EPC Contract Costs and \$214 million in owner's costs are attributed to delay
19 and disputed costs which are discussed further below.

20 **Q. WHAT AUTHORITY GUIDES ORS'S REVIEW OF THE PETITION?**

21 A. ORS is guided by the same statute that permits the BLRA modification request,
22 S.C. Code Ann. § 58-33-270(E)(1). It states, "The commission shall grant the relief
23 requested, if after a hearing, the commission finds as to the changes in the schedules,

estimates, findings, or conditions, that the evidence of record justifies a finding that the changes are not the result of imprudence on the part of the utility....” Using this statute, ORS reviews the Company’s request to determine if there has been any imprudence on the part of the utility.

Q. IN REVIEWING THE PETITION AND SUPPORTING DOCUMENTATION, DID ORS FIND THAT SCE&G ACTED IMPRUDENTLY?

A. No, ORS did not. ORS finds that the changes presented in the Petition are not the result of imprudence on the part of the Company; and therefore, in accordance with the BLRA, SCE&G should be granted the relief requested.

Q. PLEASE DESCRIBE ORS’S ACTIVITIES IN RESPONSE TO SCE&G’S PETITION.

A. ORS issued numerous requests for information and reviewed an enormous amount of data to evaluate the Company’s Petition. ORS met frequently with representatives from SCE&G’s construction, business and finance departments to discuss the details of the Petition and the supporting information. ORS also interviewed several Company technical experts to fully understand the particulars related to various components of the Petition.

Q. PLEASE DISCUSS SCE&G’S REQUEST TO MODIFY THE APPROVED CONSTRUCTION SCHEDULE.

A. In August 2014, SCE&G received a preliminary revised construction schedule from Westinghouse Electric Company and Chicago Bridge & Iron (the “Consortium”) which shows the Unit 2 SCD to be delayed until late 2018 or the first half of 2019, and the Unit 3 SCD date to be delayed by approximately one year, thereafter.

1 SCE&G's Petition includes a revised construction schedule ("Revised Schedule")
2 which shows new SCDs of June 19, 2019 and June 16, 2020 for Unit 2 and Unit 3,
3 respectively. SCE&G refers to this schedule in its Petition as the revised, fully-integrated
4 schedule. SCE&G reported to ORS that the Consortium continues to experience delays
5 in fabrication and delivery of submodules for the Units and that these delays are the
6 primary reason for the Revised Schedule.

7 **Q. HAS SCE&G AGREED TO MODIFY THE GUARANTEED SUBSTANTIAL**
8 **COMPLETION DATES IN THE EPC CONTRACT?**

9 **A.** No. SCE&G's rights to liquidated damages from the Consortium are based on the
10 guaranteed SCDs contained in the EPC Contract. The EPC Contract states that
11 guaranteed SCDs can only be revised via a change order. In Docket No. 2012-203-E,
12 SCE&G presented an agreement signed by the Company and the Consortium which
13 became the basis for Change Order #16. The Commission approved the agreement in
14 Order No. 2012-884 resulting in a revised schedule that included new SCDs which would
15 match the guaranteed SCDs in the EPC Contract.

16 In this case, SCE&G has not agreed to a change order or an agreement supporting
17 revised guaranteed SCDs. Consequently, should the Commission decide to approve the
18 Company's request, the EPC Contract will retain the guaranteed SCDs of March 15, 2017
19 and May 15, 2018 for Unit 2 and Unit 3, respectively, as approved in Order No. 2012-
20 884. However, as set forth in the Revised Schedule, the project would proceed toward
21 the new SCDs of June 19, 2019 and June 16, 2020 for Unit 2 and Unit 3, respectively. If
22 these new SCDs are approved, the guaranteed SCDs in the EPC Contract would be

different from SCDs in the Commission's order. The tables below show the history of the SCDs for the Units.

Substantial Completion Dates

Unit 2:

Order No. 2009-104(A)	Order No. 2012-884	Docket 2015-103-E
4/1/2016	3/15/2017	6/19/2019

Unit 3:

Order No. 2009-104(A)	Order No. 2012-884	Docket 2015-103-E
1/1/2019	5/15/2018	6/16/2020

Q. DOES THE DIFFERENCE IN GUARANTEED SCDs IN THE EPC CONTRACT AND THE SCDs PRESENTED FOR APPROVAL UNDER THE BLRA IN THIS PETITION CREATE A CONCERN FOR ORS?

A. No. Although the new SCDs will not have the dual-binding impact of the Commission order and the EPC Contract, the Commission orders, as always, will continue to govern ORS's determination of SCE&G's ability to adhere to the approved schedule.

Q. HOW DO THE NEW SCDs RELATE TO THE FEDERAL PRODUCTION TAX CREDITS?

A. SCE&G is eligible to receive approximately \$2.2 billion (\$1.1 billion per unit) in federal production tax credits if the Units are placed in service prior to January 1, 2021. The new SCDs meet that date. However, the 18-month boundary currently approved by the Commission in Order No. 2009-104(A) allows the SCD for Unit 3 to extend beyond January 1, 2021.

Q. PLEASE DISCUSS SCE&G'S REQUEST TO MODIFY THE CAPITAL COST ESTIMATES.

A. The Company is requesting to increase the base project cost by approximately \$698 million (2007 dollars). See Exhibit MAJ-1 for a breakdown of costs in 2007 dollars. The gross construction cost of the Units will increase by approximately \$1.1 billion (future dollars).

Base Project Cost (\$000)

(2007 Dollars)

Order No. 2012-884	Docket 2015-103-E	Change
\$4,548,405	\$5,246,638	\$698,233

Gross Construction Cost (\$000)

(Future Dollars)

Order No. 2012-884	Docket 2015-103-E	Change
\$5,754,565	\$6,826,914	\$1,072,349

Q. PLEASE PROVIDE A BREAKDOWN OF THE INCREASE IN THE BASE PROJECT COST.

A. The increase of approximately \$698 million can be represented by two major cost categories, EPC Contract Costs totaling \$453 million and Owner's Costs totaling \$245 million.

Q. PLEASE PROVIDE A BREAKDOWN OF THE EPC CONTRACT COSTS.

A. With reference to Exhibit MAJ-1, the EPC Contract Cost is approximately \$453 million which consists of \$411 million in delay and other estimated at completion ("EAC") costs (or \$325 million which is net of \$86 million in the projected recovery of liquidated damages from the Consortium); \$72 million in design finalization costs; \$56.5

million in change order costs; and a reduction of \$107,000 for switchyard re-allocation of costs.

Q. WHAT CHANGE ORDERS ARE IN THE PETITION?

A. The Petition includes the following 10 change orders totaling approximately \$56.5 million:

Change Orders (\$000)

1	Plant Layout Security	\$	20,350
2	Cyber Security Upgrades		18,816
3	Schedule Mitigation for Shield Building Panels		12,100
4	Federal Health Care Act (CO #20)		2,182
5	Plant Reference Simulator & S/W (CO #19)		1,100
6	Ovation and Common Q I&C Training Sys.		880
7	Simulator Development System		605
8	ITAAC Maintenance (CO #21)		372
9	Warehouse Fire Security		121
10	Perch Guards (CO #18)		14
	Total Costs Due to Change Orders	\$	56,540

Q. DOES ORS HAVE A RECOMMENDATION REGARDING THE CHANGE ORDERS?

A. Yes, given that several change orders are being negotiated, ORS recommends the Company track and report final change order costs in its quarterly reports filed with the Commission.

Q. PLEASE DISCUSS THE OWNER'S COSTS.

A. With reference to Exhibit MAJ-1, the Owner's Costs increase of approximately \$245 million includes \$214 million in owner's costs associated with the delay and \$31 million in owner's costs not associated with the delay.

1 **Q. PLEASE ELABORATE ON OWNER'S COSTS ASSOCIATED WITH THE**
2 **DELAY.**

3 **A.** Owner's costs associated with the delay is approximately \$214 million which
4 consists of \$125 million in owner's labor cost revisions; \$30 million in owner's risk
5 insurance and workers compensation insurance; \$6.5 million in additional information
6 technology ("IT") costs; \$6 million in facilities cost increases; and \$46 million in other
7 costs.

8 **Q. PLEASE ELABORATE ON OWNER'S COSTS NOT ASSOCIATED WITH THE**
9 **DELAY.**

10 **A.** Owner's costs not associated with the delay is approximately \$31 million which
11 consists of \$7.5 million for 64 additional employees; \$7 million in Nuclear Regulatory
12 Commission ("NRC") fees; \$3.3 million in other IT costs; and \$12.8 million in other
13 costs.

14 **Q. HOW MUCH OF THE PETITION'S TOTAL INCREASE IS RELATED TO**
15 **DELAY AND OTHER DISPUTED COST?**

16 **A.** Approximately \$539 million (or 77%) of the \$698 million increase is related to
17 delay and other disputed costs which includes \$411 million in delay and other EAC costs
18 (or \$325 million which is net of \$86 million in projected recovery of liquidated damages
19 from the Consortium), and \$214 million in owner's costs associated with the delay.

20 **Q. DOES ORS HAVE ANY FINDINGS OR RECOMMENDATIONS?**

21 **A.** Yes. ORS evaluated the Petition with regard to its statutory responsibility to
22 represent the public interest by balancing the (1) concerns of the using and consuming
23 public; (2) economic development and job attraction and retention in South Carolina; and

(3) preservation of the financial integrity of the state's public utilities. ORS also evaluated the Petition with regard to Section 58-33-270(E) of the BLRA which states:

"The commission shall grant the relief requested if, after a hearing, the commission finds:

(1) as to the changes in the schedules, estimates, findings, or conditions, that the evidence of record justifies a finding that the changes are not the result of imprudence on the part of the utility..."

ORS met frequently with representatives from SCE&G's construction, business and finance departments to discuss the methodology used to produce the estimates in the Petition. While the Company's owner's costs estimates are well supported, the EAC cost estimates provided by the Consortium, and adjusted by the Company, do not reflect the same level of detail as compared to the owner's costs estimates. Nevertheless, based on ORS's review; SCE&G's in-depth evaluation; and, SCE&G's adoption of the proposed schedule and budget, ORS finds the cost estimates to have sufficient support and provide a reasonable basis to proceed with the Units.

As ORS considers its statutory responsibility to represent the public interest in the context of the requirements of Section 58-33-270(E)(1) of the BLRA, ORS finds that the changes presented in the Petition are not the result of imprudence on the part of the Company; and therefore, in accordance with the BLRA, SCE&G should be granted the relief requested.

Q. WHO ARE THE PARTIES TO THE SETTLEMENT?

1 A. ORS, SCE&G, and the South Carolina Energy Users Committee (collectively, the
2 “Settling Parties” or the “Parties”) filed the Settlement with the Commission on June 29,
3 2015. There are two other intervening parties in this docket: CMC Steel South Carolina
4 and the Sierra Club.

5 **Q. WHAT ARE THE MAJOR COMPONENTS OF THE SETTLEMENT?**

6 A. The Parties agree that the Revised Schedule and capital cost estimates presented
7 in the Petition are consistent with the BLRA and should be approved by the Commission.

8 The Parties also agree that beginning with any revised rates filing made on or
9 after January 1, 2016, and prospectively thereafter until such time as the Units are
10 completed, SCE&G will develop and calculate its revised rates filings using 10.5% as the
11 return on common equity rather than the approved return on common equity of 11%.

12 **Q. DOES ORS SUPPORT THE SETTLEMENT?**

13 A. Yes. ORS supports this Settlement and finds it to be in the public interest. With
14 the reduction of the return on equity from 11% to 10.5%, the total impact is estimated to
15 be approximately \$15 million in savings to ratepayers. ORS respectfully requests that the
16 Commission approve the Settlement.

17 **Q. WHAT ESTABLISHES ORS’S OVERSIGHT RESPONSIBILITIES?**

18 A. Section 58-33-277(B) of the BLRA states that “[t]he Office of Regulatory Staff
19 shall conduct on-going monitoring of the construction of the plant and expenditure of
20 capital through review and audit of the quarterly reports under this article, and shall have
21 the right to inspect the books and records regarding the plant and the physical progress of
22 construction upon reasonable notice to the utility.”

23 **Q. WHAT ARE THE PRIMARY AREAS OF ORS’S OVERSIGHT ACTIVITIES?**

1 A. ORS monitors the Commission-approved construction schedule and cost
2 estimates. Section 58-33-275(A) of the BLRA states, "...capital costs are prudent utility
3 costs and expenses and are properly included in rates so long as the plant is constructed
4 or is being constructed within the parameters of: (1) the approved construction schedule
5 including contingencies; and (2) the approved capital costs estimates including specified
6 contingencies."

7 **Q. DESCRIBE ORS'S MONITORING OF THE APPROVED SCHEDULE.**

8 A. ORS visits the construction site in Jenkinsville at least twice per week to perform
9 on-site reviews of numerous documents that relate to the approved construction schedule.
10 These documents include, but are not limited to: the weekly construction activities report,
11 detailed construction schedules, milestone comparison activity report, milestone schedule
12 recovery plans, major component fabrication status log and meeting minutes. ORS also
13 attends on-site Plan of the Day meetings with "front-line" Project Managers to learn
14 about immediate construction activities and challenges. On a monthly basis, ORS and its
15 consultant meet with SCE&G's on-site lead project representatives to discuss the overall
16 status of the Units and perform an in-depth site tour to observe construction progress.

17 **Q. WHAT OTHER ACTIVITIES DOES ORS PERFORM AS PART OF ITS ON-**
18 **GOING CONSTRUCTION SCHEDULE MONITORING?**

19 A. In addition, ORS reviews the Company's required quarterly reports, which,
20 among other things, provide a status of the approved BLRA milestone schedule. The
21 BLRA milestone schedule consists of 146 milestone activities. ORS verifies the status of
22 each milestone activity to ensure the construction activity is in accordance with the

Commission's order. Milestone activities are allowed to be accelerated by up to 24 months or delayed by up to 18 months.

Q. PLEASE DESCRIBE ORS'S MONITORING OF THE APPROVED CAPITAL COST ESTIMATES.

A. ORS compares the capital cost estimates approved by the Commission to the cost estimates in the Company's quarterly reports. This comparison focuses on the 9 major cost categories, which are:

1. Fixed with No Adjustment
2. Firm with Fixed Adjustment A
3. Firm with Fixed Adjustment B
4. Firm with Indexed Adjustment
5. Actual Craft Wages
6. Non-Labor Cost
7. Time & Materials
8. Owner's Costs
9. Transmission Projects

ORS evaluates cost variances which may be due to various project changes (e.g., shifts in work scopes, payment timetables, construction schedule adjustments, change orders, etc.) to determine if the cumulative amount of these changes impact the total approved capital cost of the project (in 2007 dollars).

In a similar fashion, ORS compares the approved project cash flow to the project cash flow in the Company's quarterly reports. This comparison focuses on any impact to annual cash flow requirements.

Lastly, allowance for funds used during construction and escalation rates are evaluated to determine if appropriate rates have been applied.

**Q. WHAT OTHER ACTIVITIES DOES ORS PERFORM AS PART OF ITS ON-
GOING MONITORING OF THE APPROVED CAPITAL COST ESTIMATES?**

A. During on-site visits, ORS reviews documents that may impact the project budget. Examples of such documents are contract amendments and change orders. ORS also reviews invoices associated with completed milestone activities to ensure milestone payments are consistent with the EPC Contract milestone payment schedules. In addition, ORS's Audit Division further evaluates the Company's actual project expenditures.

Q. PLEASE ELABORATE ON ORS'S AUDIT DIVISION'S EVALUATIONS.

A. ORS Audit Division personnel conduct regulatory audit procedures on the Company's recorded project expenditures. ORS evaluates the Company's accounting controls over project expenditures and, based on this evaluation, ORS determines the extent to which these controls prevent improper payments.

**Q. DOES ORS EXAMINE EACH DISBURSEMENT TO ENSURE THAT THE
CONTROLS OVER DISBURSEMENTS ARE BEING PROPERLY APPLIED?**

A. No. In accordance with standard audit procedures, ORS examines a sample of expenditures to ensure that the controls are being applied. These samples are selected from the entire population of charges to the construction project account.

**Q. PLEASE DESCRIBE THE PROCEDURES PERFORMED TO ENSURE THAT
DISBURSEMENTS COMPLY WITH THE INTERNAL CONTROLS.**

A. For each disbursement selected, Audit staff examines vendor invoices to ensure: invoices are from valid vendors; charges included are related to the project; the charges are for the correct time period; invoices are mathematically correct; proper approval

signatures are evident on the invoice routing documents; accounts charged are consistent with the nature of the disbursements; and items have been charged to the proper EPC Contract cost category.

Q. WHAT OTHER MONITORING ACTIVITIES DOES ORS PERFORM?

A. ORS technical staff, as well as, senior and executive management, participate in quarterly meetings with SCE&G's executive management. ORS meets quarterly with the Consortium representatives, attends NRC public meetings held near the site, and participates in NRC conference calls to monitor federal licensing activities. Additionally, ORS traveled to fabrication facilities in South Carolina, Virginia, Louisiana, and Florida to monitor the fabrication of major structural modules, shield building panels, mechanical modules and components.

Q. ARE THE RESULTS OF ORS'S OVERSIGHT ACTIVITIES AVAILABLE TO THE PUBLIC?

A. Yes. Subsequent to each quarterly report filed by SCE&G, ORS generates a report which details ORS's review of the Company's quarterly report as well as other notable activities related to the construction of the Units. ORS reports are non-confidential and available at www.regulatorystaff.sc.gov. In addition to ORS's review of SCE&G's quarterly reports, ORS responds to the Company's annual request for revised rates. ORS examines SCE&G's annual revised rates filing which seeks rate recovery to cover the financing of project expenditures. ORS reviews the request and issues a report documenting its findings.

Q. DOES THIS CONCLUDE YOUR SETTLEMENT TESTIMONY?

A. Yes, it does.

SC Office of Regulatory Staff
SCE&G Petition to Modify the Approved Schedule and Budget
for VC Summer Units 2&3
Docket No. 2015-103-E

Revision to Capital Cost Estimates (\$000)
(2007 Dollars)

a. EPC Contract Costs

i. Delay and Other EAC Costs	
Delay Costs and Other EAC Costs	\$ 410,328
Less "Liquidated Damages"	(85,525)
Net Delay and Other EAC Costs ^(a)	\$ 324,803
ii. Design Finalization Costs	
Costs Assoc. w/Final Design Finalization	\$ 71,899
Total Design Finalization Costs	\$ 71,899
iii. Costs Due to Change Orders:	
1 Plant Layout Security	\$ 20,350
2 Cyber Security Upgrades	18,816
3 Schedule Mitigation for Shield Building Panels	12,100
4 Federal Health Care Act (CO #20)	2,182
5 Plant Reference Simulator & S/W (CO #19)	1,100
6 Ovation and Common QI&C Training Sys.	880
7 Simulator Development System	605
8 ITAAC Maintenance (CO #21)	372
9 Warehouse Fire Security	121
10 Perch Guards (CO #18)	14
Total Costs Due to Change Orders	\$ 56,540
iv. Switchyard Cost Re-allocation	\$ (107)
Total EPC Contract Costs	\$ 453,136

b. Owner's Cost Revisions Associated w/Delay

i. Owner's Labor Cost Revisions	\$ 125,279
ii. Owner's Risk Insurance & Workers Comp.	30,101
iii. Additional IT Costs	6,504
iv. Facilities Cost Increases	6,071
v. Other Owner's Costs	46,351
Total Owner's Cost Assoc. w/Delay ^(b)	\$ 214,307

c. Owner's Cost Increases Not Assoc. w/Delay

i. Additional 64 Employees	\$ 7,535
ii. NRC Fees	7,094
iii. Other IT Costs	3,309
iv. Other Costs	12,851
Total Owner's Cost Increases Not Assoc. w/Delay	\$ 30,789

Total Owner's Cost Increase	\$ 245,096
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Total Delay and Disputed Costs ^{(a)+(b)}	\$ 539,110
--	-------------------

Total Revision to Cost Forecast	\$ 698,233
--	-------------------

Note: Totals may not add due to rounding



Stephen A. Byrne
President Generation & Transmission & COO
sbyrne@scana.com

September 25, 2014
NND-14-0600

Jeff Lyash
President, Power
CB&I Stone & Webster
128 S. Tryon Street, Suite 100
Charlotte, NC 28202

Subject: V.C. Summer Units 2 and 3 Guaranteed Substantial Completion Dates

- Reference:**
- (1) Engineering, Procurement, and Construction Agreement for AP 1000 Nuclear Power Plants, Dated May 23, 2008- V.C. Summer Units 2 and 3
 - (2) VSP_VSG_002024, dated August 6, 2012
 - (3) Owner's unnumbered letter, dated May 6, 2014
 - (4) VSP_VSG_002819, dated July 16, 2014
 - (5) VSP_VSG_002861, dated July 25, 2014
 - (6) Consortium's unnumbered letter, dated July 25, 2014
 - (7) VSS_VSG_002044, dated September 16, 2014

Dear Mr. Lyash:

The Consortium's letter of July 16, 2014 (reference 4), its two letters of July 25, 2014 (reference 5 and 6), and your letter of September 16, 2014 (reference 7) address three issues to which we wish to respond here, with the hope of putting them to rest.

The first issue is the cause of the various project delays that appear certain to prevent the Consortium from achieving the agreed Guaranteed Substantial Completion Dates (GSCDs) of March 15, 2017, and May 15, 2018. The second issue is the Consortium's contention that it should benefit from its unexcused delays by receiving excess escalation payments. The third issue is the Consortium's analogous contention

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September 25, 2014
Page 2

that it should benefit from certain Project Payment Schedules, although those schedules are out of sync with the Consortium's actual progress due to its unexcused delays.

I. THE CONSORTIUM IS RESPONSIBLE FOR THE CURRENT PROJECT DELAYS

With respect to the first issue—the cause of the project delays—the Owner provided a detailed account of the Consortium's performance deficiencies relating to the structural modules and project design, in its letter of May 6, 2014 (Reference 3). That account was incomplete. It did not provide an exhaustive list of all the Consortium's performance deficiencies or a complete statement of the Owner's damages. Nonetheless, it was sufficient to show that the Project Delays are the Consortium's responsibility.

The Consortium indirectly responded to our account in its letter of July 16, 2014 (Reference 4) by denying that it is responsible for all costs associated with the Project delays. The Consortium had not previously identified any circumstances or events that would justify a schedule extension, and even its July 16, 2014 letter failed to do so. Although that letter alluded to regulatory-driven changes and unforeseeable events that complicated the Consortium's task of re-baselining the Project Schedule, the letter provided no details about those matters and fell well short of the EPC Agreement standards for Notice of a Change. The Consortium responded more directly to our account in its letter of July 25, 2014 (Reference 6) but still did not provide any details to justify the delays. The letter merely referred vaguely to regulatory-driven changes and events that allegedly impacted the Consortium's efficiency.

We conclude from all this that the Consortium has no grounds for a Change to the Project Schedule and all Project delays to date are unexcused. We address certain implications of these unexcused delays in the next two sections of this letter.

II. THE CONSORTIUM IS NOT ENTITLED TO EXCESS ESCALATION PAYMENTS

The second issue relates to escalation payments. The EPC Agreement was originally priced using 2007 dollars. Under that agreement, the Consortium agreed to perform in accordance with the Project Schedule, with the understanding that the Owner would make escalated payments in later calendar years for Firm Price work completed according to the Project Schedule.

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September 25, 2014
Page 3

In its letters, the Consortium contends that, where the Consortium fails to complete the various parts of the Project when agreed, the Owner must continue to escalate the Milestone Payments until the Consortium finally does complete such parts of the Project, regardless of the cause of the delay. This contention inappropriately divorces the Price Adjustment Provisions from the context of the EPC Agreement. Under that agreement, the Price Adjustment Provisions are interconnected with the Milestone Payment Schedules and the Project Schedule. These interconnected components of the EPC Agreement require the Contractor to perform in accordance with the Project Schedule and condition escalation of Milestone Payments on the Consortium's timely completion of the Project Schedule activities. Nothing in the EPC Agreement or normal business practices suggests that the Consortium should reap a financial benefit, in the form of excess escalation payments, when the Consortium is responsible for late completion of the Milestones.

To support its contention about excess escalation payments, the Consortium points to the Liquidated Damages provision in the EPC Agreement. That provision states that Liquidated Damages are the Owner's exclusive remedy for the Consortium's failure to achieve Substantial Completion of a Unit on or before the GSCD for such Unit. The Liquidated Damages provision does not control the excess escalation question, however, because neither of two key features of that provision applies here. The Owner is not seeking at this time any additional remedy beyond Liquidated Damages. And the excess escalation payments in question are not associated with delays to the GSCDs.

The Liquidated Damages provision does not control the escalation issue, because the Owner is not seeking a remedy with respect to excess escalation payments. Instead, it is the Consortium that is seeking a remedy, namely, the recovery of excess escalation payments associated with its unexcused delay. If the Consortium intended to assert a Claim for delay damages, such as escalation costs, the Consortium would have to comply with the Claim provisions of the EPC Agreement and show, among other things, that the delays were excusable. In addition, the Consortium would also have to show that it actually incurred additional escalation costs in connection with the Milestone payments. The Liquidated Damages provision does nothing to relieve the Consortium of these requirements, neither of which the Consortium has met or could meet.

The Liquidated Damages provision also does not control the excess escalation issue because it does not address the Owner's remedies for late completion of Project Milestones. That provision expressly applies only to late Substantial Completion. The daily Liquidated Damages amounts are reasonably related to the revenue that the

NND-14-0600
September 25, 2014
Page 4

Owner would lose by not being able to produce and sell power in the event of delays to Substantial Completion. Consequently, the Liquidated Damages provision is limited to late Substantial Completion and establishes the exclusive remedy for the Consortium's failure to achieve Substantial Completion by the agreed GSCDs, but only for such failure. The Liquidated Damages provision does not exclude or limit the Owner's remedies for other Consortium delays, such as the Consortium's failure to achieve Milestones on the dates stated in the Project Schedule. The Liquidated Damages provision is silent as to those other delays and, therefore, does not limit the Owner's associated remedies.

In its letters of July 25, 2014 (reference 5) and September 16, 2014 (reference 7), the Consortium requests that the Owner make partial payment of the excess escalation amounts, pending resolution of the dispute, under Article 8 of the EPC Agreement. We acknowledge that Article 8 addresses payment for disputed Claims, but that article is subject to several limitations. First and foremost, the article is limited by the parties' mutual obligation to deal with one another fairly and in good faith. Due to this limitation, the Consortium could not bill the Owner for completely unrelated items, such as work on Plant Vogtle, or, if it did so, it would have no right to payment of 90% of the invoiced amount, pending resolution of the inevitable dispute.

Billings for disputed Claims are also subject to additional limitations imposed by other parts of the EPC Agreement. For example, Article 27 requires that a Claim be initiated by written notice and makes such notice a condition precedent to any further proceedings with respect to a Claim. That article also puts the burden of substantiating a Claim on the Party making the Claim. Article 9 states that any changed work performed before execution of a Change Order is at the Consortium's risk.

The limitations imposed by Article 9 and 27 must be read together with Article 8. In combination, these articles do not require any payment for a disputed Claim until the Consortium first takes certain steps to establish the Claim. The steps include giving proper notice and providing supporting information to substantiate the Claim. As noted above, the Consortium has not taken any of the necessary steps.

III. CERTAIN PROJECT PAYMENTS SCHEDULES SHOULD BE ADJUSTED

The third issue relates to certain Project Payment Schedules that are calendar-based but are out of sync with the Consortium's currently anticipated completion dates of the Project components. Those Payment Schedules, in their current form, would require full payment well in advance of when the Consortium expects to complete the

NND-14-0600
September 25, 2014
Page 5

Project. The disconnect is almost certain to worsen with the upcoming re-baselined work schedule.

We have addressed this problem by rejecting recent requests for payments that were not justified by the Consortium's current Project Schedule, although we have not approved that schedule. Once we accept the new re-baselined work Project Schedule, we will reject payments that are not justified by the re-baselined Project Schedule. The justification for these adjustments is much the same as the justification, stated above, for not making excess escalation payments. The Consortium has no right to be rewarded for unexcused Project delays by receiving payment in advance of when it actually performs the work.

Please advise if you have any questions about these matters.

Sincerely,



Stephen A. Byrne
President, Generation & Transmission
South Carolina Electric & Gas

Jones/Smith/lw

cc: Ronald Jones - SCE&G
Carlette Walker - SCE&G
Al Bynum - SCE&G
Alan Torres - SCE&G
Brad Stokes - SCE&G
April Rice - SCE&G
Roosevelt Word - SCE&G
Larry Cunningham - SCE&G

David Lavigne - SCE&G

Marion Cherry - Santee Cooper
Christopher Levesque - Westinghouse
Joel Hjelseth - Westinghouse

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September 25, 2014
Page 6

JoAnne Hyde
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Westinghouse/CB&I Stone & Webster – Proprietary & Confidential



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Telephone: (412) 374-5650
Fax: (724) 940-8521
Email: hydej@westinghouse.com

Our Reference: VSP_VSG_002968

VIA: E-Mail

September 25, 2014

Subject: First and Second Notices of Unpaid CB&I Stone & Webster, Inc. Invoices Pursuant to Section 8.4(c) of the EPC Agreement

References:

- 1) Engineering, Procurement, and Construction Agreement for AP1000® Nuclear Power Plants, Dated May 23, 2008 – V.C. Summer Units 2 and 3 (“Agreement”)
- 2) CB&I Stone & Webster Invoice No. 1529816 due August 29, 2013 for \$52,473
- 3) NND-13-0478, “CB&I/Stone & Webster Target Invoice 1529816-R8-00360,” Dated August 22, 2013
- 4) CB&I Stone & Webster Invoice No. 1602383 due December 1, 2013 for \$360,549
- 5) NND-13-0694, “Partial Return of CB&I/Stone & Webster Target Price Invoice 1602383-R8-00360, dated November 11, 2013,” Dated November 25, 2013
- 6) CB&I Stone & Webster Invoice No. 1620649 due December 26, 2013 for \$15,984
- 7) NND-13-0746, “Partial Return of CB&I/Stone & Webster Target Price Invoice 1620649-R8-00360, dated December 6, 2013,” Dated December 19, 2013
- 8) CB&I Stone & Webster Invoice No. 1646382 due January 30, 2014 for \$80,333
- 9) NND-14-0046, “Partial Return of CB&I/Stone & Webster Target Price Invoice 1646382-R8-00360, dated January 10, 2014,” Dated January 27, 2014
- 10) CB&I Stone & Webster Invoice No. 1669753-R8-00360, due February 27, 2014 for \$85,101
- 11) NND-14-0097, “Partial Return of CB&I/Stone & Webster Target Price Invoice 1669753-R8-00360, dated February 10, 2014,” Dated February 24, 2014
- 12) CB&I Stone & Webster Invoice No. 1697884-R8-00360, due March 27, 2014 for \$116,675

Electronically approved records are authenticated in the Electronic Document Management System.

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CB&I Stone & Webster, Inc.

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- 13) NND-14-0157, "Partial Return of CB&I/Stone & Webster Target Price Invoice 1697884-R8-00360," dated March 7, 2014," Dated March 21, 2014
- 14) CB&I Stone & Webster Invoice No. 1716927 due April 24, 2014 for \$46,713
- 15) NND-14-0213, "Partial Return of CB&I/Stone & Webster Target Price Invoice 1716927-R8-00360, dated April 4, 2014," Dated April 21, 2014
- 16) VSP_VSG_002753, "Section 8.4 of the Agreement," Dated May 7, 2014
- 17) VSP_VSG_002757, "Response to NND-14-0213, 'Partial Return of CB&I/Stone & Webster Target Price Invoice 1716927-R8-00360, dated April 4, 2014'," Dated May 8, 2014
- 18) CB&I Stone & Webster Invoice No. 1756516 due May 26, 2014 for \$20,072
- 19) NND-14-0286, "Partial Return of CB&I/Stone & Webster Target Price Invoice 1756516-R8-00360, dated May 6, 2014," Dated May 20, 2014
- 20) VSP_VSG_002783, "Response to NND-14-0286, 'Partial Return of CB&I/Stone & Webster Target Price Invoice 1756516-R8-00360, dated May 6, 2014'," Dated May 30, 2014
- 21) CB&I Stone & Webster Invoice No. 1794841 due July 25, 2014 for \$26,564,853
- 22) NND-14-0375, "Return of CB&I/Stone & Webster, Inc. F.1.5 Milestone Invoice 1794841-R8-00361, dated June 25, 2014," Dated June 30, 2014
- 23) CB&I Stone & Webster Invoice No. 1798659 due July 31, 2014 for \$571,526
- 24) NND-14-0411, "July 2014 Escalation for EPC F.1.3 and F.1.5 Invoices," Dated July 16, 2014
- 25) CB&I Stone & Webster Invoice No. 1832044 due August 28, 2014 for \$2,440,778
- 26) NND-14-0497, "Partial Return of CB&I/Stone & Webster Target Price Invoice 1832044-R8-00360, dated August 8, 2014," Dated August 25, 2014

Action: Remit Payment of Invoices Contained Herein in Accordance with Section 8.4(c)

Dear Mr. Smith:

There has been considerable correspondence between Contractor and Owner concerning Owner's refusal to pay various invoices due to Contractor, including but not limited to, the correspondence and invoices referenced above. The listed invoices do not include the unpaid CB&I Stone & Webster, Inc. (Stone & Webster) invoices which Contractor understands will be paid upon the execution of Change Orders No. 16 and 17.

Contractor, specifically Stone & Webster, has made its position clear with respect to our entitlement to payment under the Agreement and therefore do not believe it constructive to continue further dialogue on this issue. Suffice to say, the Owner has not provided a valid contractual basis under the Agreement justifying its refusal to pay the full amount of the invoices submitted. Assuming there was a valid, good faith, contractual dispute between the Parties, the Owner is still obligated to pay the entire disputed amount under \$1,000,000 and ninety percent (90%) of any disputed amount exceeding \$1,000,000. Owner's position that it can deem an invoice "deficient" or otherwise withhold all or partial payments is not grounded in either the intent or the plain language of the Agreement. The Owner's withholding of payments due on numerous invoices is without legitimate basis and is in direct contravention of the terms of the Agreement.

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September 25, 2014
Page 3 of 4

Consequently, pursuant to Section 8.4(c) of the Agreement, this shall constitute Stone & Webster's first notice of Owner's failure to pay the following invoices by their due date:

Invoice No.	Due Date	Amount
1529816-R8-00360	8/29/2013	\$ 52,473
1794841-R8-00360	7/25/2014	\$ 26,564,853
1798659-R8-00360	7/31/2014	\$ 571,526
1832044-R8-00360	8/28/2014	\$ 2,440,778

In the event that the Owner fails to pay such amounts within seven (7) Days of its receipt hereof, Stone & Webster will proceed to exercise its rights in accordance with the terms of the Agreement.

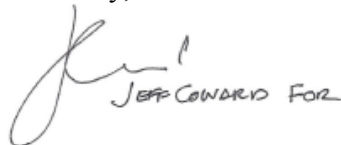
In addition, pursuant to Section 8.4(c) of the Agreement, this shall constitute Stone & Webster's second notice of Owner's failure to pay the following invoices by their due date:

Invoice No.	Due Date	Amount
1602383-R8-00360	12/1/2013	\$ 360,549
1620649-R8-00360	12/26/2013	\$ 15,984
1646382-R8-00360	1/30/2014	\$ 80,333
1669753-R8-00360	2/27/2014	\$ 85,101
1697884-R8-00360	3/27/2014	\$ 116,675
1716927-R8-00360	4/24/2014	\$ 46,713
1756516-R8-00360	5/26/2014	\$ 20,072

In the event that the Owner fails to pay these invoices within fifteen (15) Days of the Owner's receipt of this letter, Owner is advised that in accordance with Section 8.4(c) of the Agreement, "If Owner fails to make payment of the undisputed amount due within fifteen (15) Days following its receipt of this second notice, Contractor has the right to suspend performance of the Work as if Owner had ordered a suspension in accordance with Section 22.1." The Consortium expressly reserves its right to do so along with exercising its rights under Section 22.5 to terminate the Agreement and any other remedy available to it.

If you have any questions, please feel free to contact Charlie White at (980) 321-8588 or the undersigned.

Sincerely,



Jeff Coward for

JoAnne W. Hyde
Consortium Commercial Director
Westinghouse Electric Company LLC

LAV/SNM/JLC/cef

cc: Ronald A. Jones – SCE&G
Alan D. Torres – SCE&G
Carlette Walker – SCE&G
Robert B. Stokes – SCE&G
April Rice – SCE&G
David Lavigne – SCE&G
Larry Cunningham – SCE&G
Roosevelt Word – SCE&G
Ken Browne – SCE&G
Al Bynum – SCE&G
Guy Bradley – SCE&G
Marion Cherry – SCE&G
Christopher Levesque – Westinghouse
Joel Hjelseth – Westinghouse
Daniel Churchman – Westinghouse
Daniel Magnarelli – Westinghouse
Brian McIntyre – Westinghouse
William Macecevic – Westinghouse
Travis Tomb – Westinghouse
Jeff Coward – Westinghouse
Michael Frankle – Westinghouse
Luke Miller – Westinghouse
Linda Ackerman – Westinghouse
Duane Olcsvary – Westinghouse
Susan May – Westinghouse
Denise Cervenyak – Westinghouse

Kenneth Hollenbach – CB&I Stone & Webster
Sean Burk – CB&I Stone & Webster
William O. Wood – CB&I Stone & Webster
Mehdi Maibodi – CB&I Stone & Webster
Charlie White – CB&I Stone & Webster
Lucinda Vasbinder – CB&I Stone & Webster
Dale Garrison – CB&I Stone & Webster
Brian Hobbs – CB&I Stone & Webster
Kenneth Jenkins – CB&I Stone & Webster
A. J. Marciano – CB&I Stone & Webster
Joseph Arostegui – CB&I Stone & Webster
Rebecca Russell – CB&I Stone & Webster
Mike Marconi – CB&I Stone & Webster
Benny Buras – CB&I Stone & Webster
Mark Glover – CB&I Stone & Webster
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RESTATED and UPDATED CONSTRUCTION EXPENDITURES

(Thousands of \$)

V.C. Summer Units 2 and 3 - Summary of SCE&G Capital Cost Components

Actual through March 2016* plus Projected		Actual									Projected				
Plant Cost Categories	Total	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Fixed with No Adjustment	3,657,459	4,628	35,199	22,066	67,394	50,551	66,057	22,960	11,634	366,348	753,742	1,110,388	756,960	325,881	63,652
Firm with Fixed Adjustment A	266,750	-	-	63,250	27,500	24,200	75,075	42,900	7,700	26,125	-	-	-	-	-
Firm with Fixed Adjustment B	238,868	-	5,499	35,768	49,513	39,371	45,043	31,048	22,834	9,791	-	-	-	-	-
Firm with Indexed Adjustment	873,741	-	45,869	148,713	115,172	137,871	118,769	150,530	129,994	26,822	-	-	-	-	-
Actual Craft Wages	133,306	-	312	1,937	9,779	11,682	21,091	25,217	38,785	24,503	-	-	-	-	-
Non-Labor Costs	406,936	-	1,271	31,255	79,778	9,298	65,227	70,154	105,390	44,564	-	-	-	-	-
Time & Materials	60,816	-	1,013	155	1,004	764	1,878	2,300	4,055	2,048	6,761	9,413	24,329	6,686	410
Owners Costs	837,363	17,096	8,198	15,206	23,743	29,276	43,643	47,245	51,807	56,885	113,992	133,978	127,821	106,102	62,372
Transmission Costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Base Project Costs(2007 \$)	6,475,239	21,723	97,360	318,349	373,883	303,013	436,784	392,354	372,200	557,085	874,495	1,253,779	909,110	438,669	126,434
Total Project Escalation	485,205	-	3,516	20,907	23,688	32,930	68,787	81,553	86,682	47,711	13,877	25,376	40,530	25,071	14,576
Total Revised Project Cash Flow	6,960,444	21,723	100,876	339,256	397,571	335,943	505,571	473,907	458,882	604,797	888,372	1,279,156	949,640	463,740	141,010
Cumulative Project Cash Flow(Revised)		21,723	122,600	461,856	859,427	1,195,370	1,700,941	2,174,848	2,633,730	3,238,526	4,126,898	5,406,054	6,355,695	6,819,434	6,960,444
AFUDC(Capitalized Interest)	299,631	645	3,495	10,539	17,099	14,039	17,538	23,723	21,563	18,713	30,715	57,802	51,673	23,121	8,965
Gross Construction	7,260,075	22,368	104,371	349,795	414,670	349,981	523,109	497,631	480,445	623,510	919,088	1,336,958	1,001,313	486,861	149,975
Construction Work in Progress		22,368	126,739	476,535	891,205	1,241,186	1,764,295	2,261,926	2,742,371	3,365,881	4,284,968	5,621,926	6,623,239	7,110,100	7,260,075

*Applicable index escalation rates for 2016 are estimated. Escalation is subject to restatement when actual indices for 2016 are final.

Notes:

Current Period AFUDC rate applied

5.82%

Escalation rates vary from reporting period to reporting period according to the terms of Commission Order 2009-104(A). These projections reflect current escalation rates. Future changes in escalation rates could substantially change these projections. The AFUDC rate applied is the current SCE&G rate. AFUDC rates can vary with changes in market interest rates, SCE&G's embedded cost of capital, capitalization ratios, construction work in process, and SCE&G's short-term debt outstanding.

RESTATED and UPDATED CONSTRUCTION EXPENDITURES

(Thousands of \$)

V.C. Summer Units 2 and 3 - Summary of SCE&G Capital Cost Components**Summary of Project Costs Incurred July 2016 through December 2017**

	Total	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Fixed with no escalation	904,802	44,888	40,430	162,654	76,432	97,830	63,550	41,369	45,109	6,108	80,940	74,862	98,086	64,352	(465)	8,658			
Firm with Fixed Escalation @ 5.2%	-	-	-	-	-	-	-												
Firm with Fixed Escalation @ 6.5%	-	-	-	-	-	-	-												
Firm with Indexed Escalation	-	1	(1)	-	-	-	-												
Actual Craft Wages	-	-	-	-	-	-	-												
Non-Labor Costs	-	-	-	-	-	-	-												
Time & Materials	2,433	1	1	0	15	1,887	419	416	(307)	-	-	-	-	-					
Owners Costs-Plant	120,410	5,151	5,236	6,714	5,981	7,184	12,921	5,709	5,597	7,926	5,089	6,162	10,849	4,936	18,606	12,307			41
Project Cost Escalation	15,922	769	782	1,002	947	2,435	2,298	1,207	683	1,272	832	1,007	1,773	915					
Total Revised Project Cash Flow	1,043,567	50,810	46,449	170,371	83,374	109,336	79,187	48,702	51,083	15,306	86,861	82,031	110,707	70,203	18,140	20,965	-	-	41
Cumulative Project Cash Flow(Revised)		50,810	97,259	267,630	351,004	460,340	539,527	588,229	639,312	654,618	741,479	823,510	934,217	1,004,420	1,022,560	1,043,526	1,043,526	1,043,526	1,043,567
AFUDC(Capitalized Interest)	35,501	3,479	4,014	619	2,656	3,660	2,523	3,082	3,247	3,602	4,105	4,511	1,250	4,569		(6,713)			898
Gross Construction	<u>1,079,068</u>	<u>54,289</u>	<u>50,463</u>	<u>170,990</u>	<u>86,030</u>	<u>112,996</u>	<u>81,710</u>	<u>51,784</u>	<u>54,329</u>	<u>18,907</u>	<u>90,966</u>	<u>86,542</u>	<u>111,958</u>	<u>74,772</u>	<u>18,140</u>	<u>14,252</u>	<u>-</u>	<u>-</u>	<u>939</u>
Construction Work in Progress		54,289	104,752	275,742	361,772	474,768	556,479	608,263	662,592	681,500	772,466	859,007	970,965	1,045,737	1,063,877	1,078,129	1,078,129	1,078,129	1,079,068